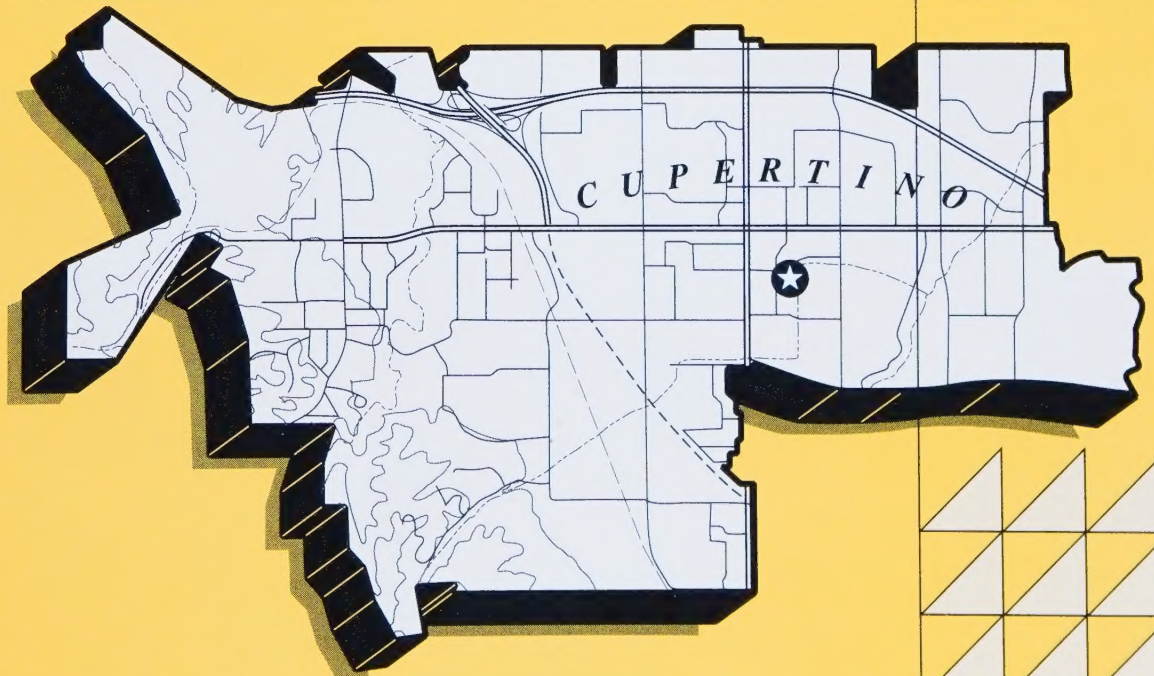
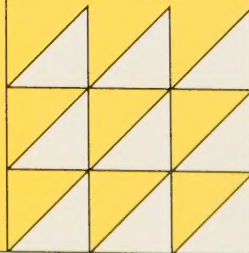
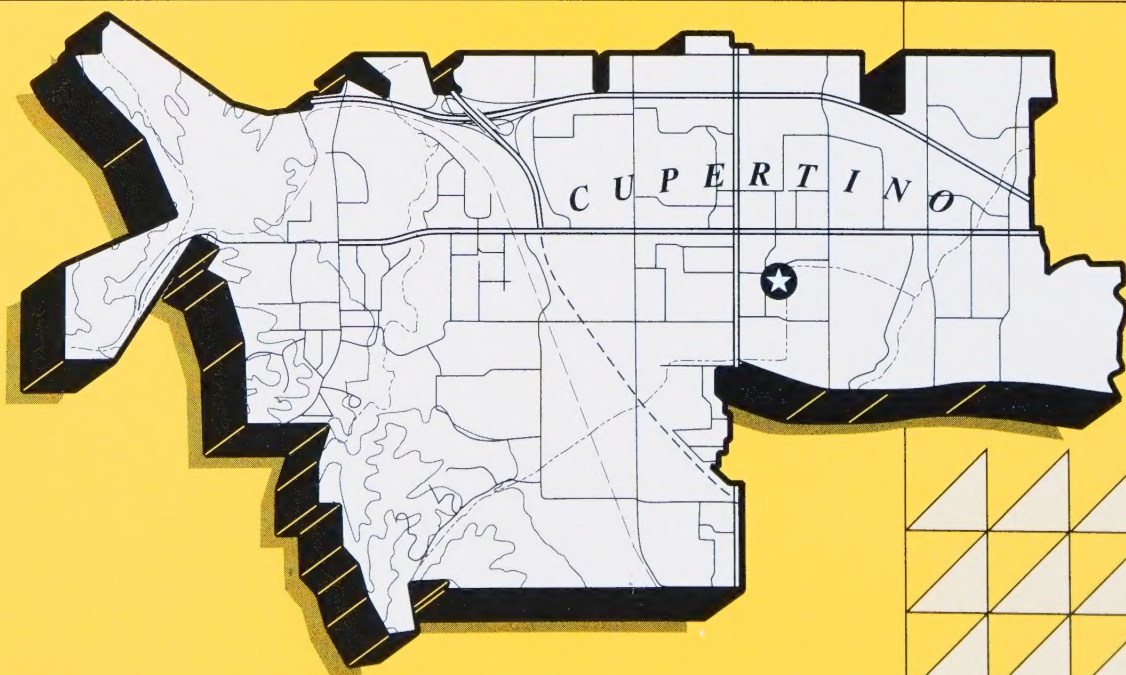


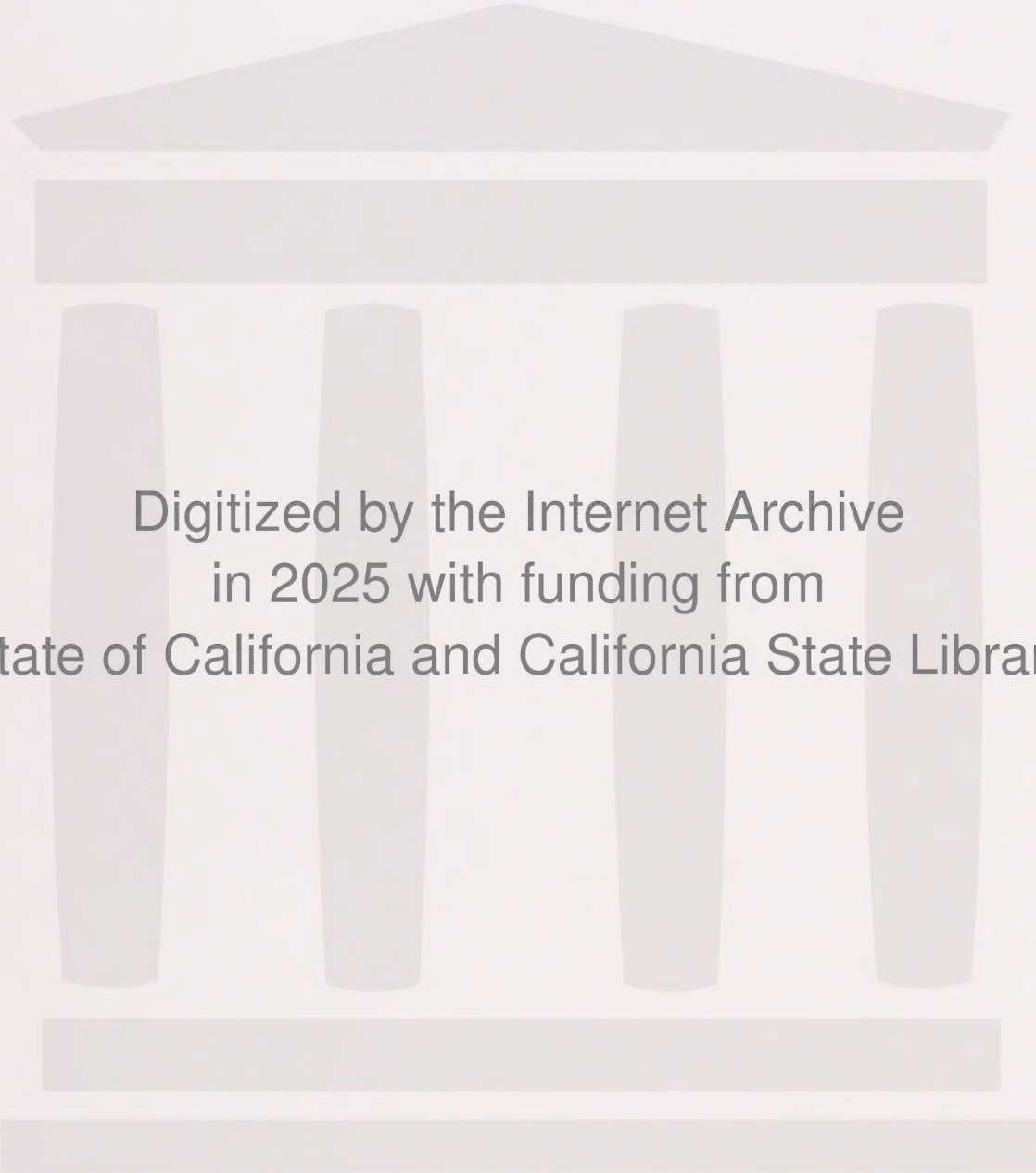


The City of Cupertino

GENERAL PLAN







Digitized by the Internet Archive
in 2025 with funding from
State of California and California State Library

<https://archive.org/details/C124906764>

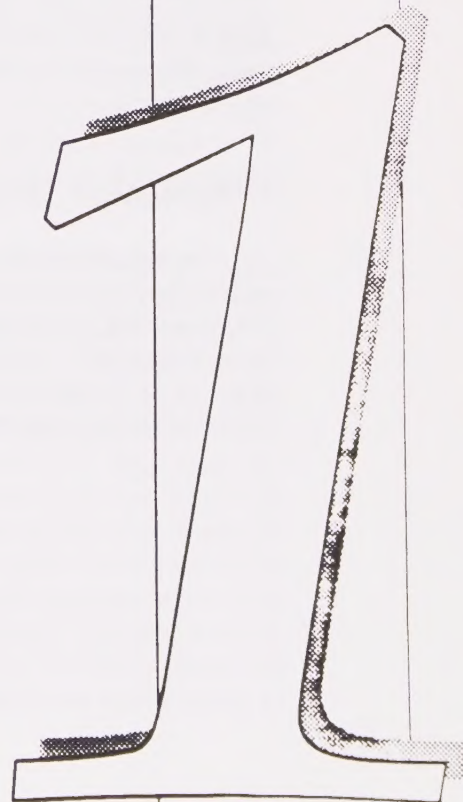
Introduction



INSTITUTE OF GOVERNMENTAL
STUDIES LIBRARY

FEB 26 1993

UNIVERSITY OF CALIFORNIA



Introduction

The City of Cupertino's task is to develop a long-range set of goals for the City's physical and social development that best meet the needs of its residents. This is accomplished through a comprehensive General Plan that contains five sub-plans or elements. The elements are Land Use/Community Character, Housing, Circulation, Environmental Resources, and Public Health and Safety. An Implementation section follows these elements.

Community Setting

Cupertino is located on the San Francisco Peninsula. It was incorporated in 1955 and has seen its land use shift from agriculture to homes and industry. Cupertino was motivated to set its original boundaries by residents who were concerned that nearby cities' attempts to incorporate the area would submerge Cupertino's distinctive qualities and diminish home-rule. In this way, "community character" has been an integral aspect of Cupertino since it was established.

Land Form


Most of Cupertino is on level ground that rises gently to the west. The incline increases at the channel of Stevens Creek, forming a short plateau near Foothill Boulevard. The plateau ends at the foot of the steep Montebello system of ridges, which extends along the west and south edges of Cupertino, creating a dramatic amphitheater backdrop to the valley floor.

Built Form

Development in Cupertino from the late 1950s to the late 1960s generally concentrated on homes. Since the mid-1970s, construction of industry has expanded dynamically. Jobs are centered in new developments including Vallco Industrial Park, North De Anza Boulevard Industrial Park, City Center and the popular regional shopping mall, Vallco Fashion Plaza. The east, and north-central areas, and central areas of town have had the newest and most intensely urban development, while the southerly and westerly areas have mostly retained a moderate residential character and a greater proportion of older, well-established neighborhoods.

Geographical Boundary of the Plan

The boundaries are not simple. Figure 1-A shows the planning area within the City's corporate limits and pockets of land now under the jurisdiction of Santa Clara County. County lands are included because Cupertino land use decisions affect their residents. Also, State legislation encourages cities to plan for all areas within their "Sphere of Influence." General Plan decisions will not legally bind people who own property in County jurisdiction unless the property is annexed into Cupertino. Annexation policy is explained in the Plan's Implementation Element.



The Planning Process


This Plan evolved from a land use plan adopted in 1964. Each amendment to that plan added content and implementation technique.

There are four basic steps in the planning process.

1. Data collection.
2. Development of alternative goals.
3. Evaluation of alternatives.
4. Development of a plan to carry out the favored alternative.

A high degree of public participation by residents, special interest groups, and officials is required for the goal formulation phase. ~~The General Plan goals were developed by a Citizens Goals Committee over two years, ending in 1972. Those goals are in this Plan.~~ Each major General Plan revision has involved a Citizen Goals Committee, whose recommendations are considered in the review process, and are largely reflected in the final General Plan document. The planning process must remain flexible to allow for social and economic changes beyond the control of local government. An annual Plan review process achieves this flexibility because it lets the Planning Commission set the Plan goals based on new information. A major overhaul of the Plan will become necessary if economic and social changes are significant.

External Factors That Influence the Plan



The private market dominates land use. A public goal to increase stores, housing, or industry can only be carried out if the private sector will invest in the community. Commercial and industrial investors will make their decisions based on factors that may or may not be under the control of cities. Here are two examples. Commercial investors want a market analysis that favors development, showing encouraging estimates of future population and household income and an acceptable level of competition from other commercial centers. The Plan may designate a parcel of land for high-density residential use that may or may not be economically possible because of public preferences for housing types. These examples show that while Cupertino has a great deal of control over land use, land use decisions must relate realistically to market forces. It is especially difficult for Cupertino or any other city when a desired land use pattern may be possible in the long term but not possible in the next one to five years. The difficulty comes because landowners may find immediate development more economical due to taxes and possible lost income. In addition to marketplace constraints, the Plan is heavily influenced by policies of other local governments and by actions other governmental agencies.

Regional agencies and local special districts constrain Cupertino's planning abilities the most. Midpeninsula Regional Open Space District's policy of acquiring significant acreage in the lower foothills next to the westerly City limit has set Cupertino's growth boundary. ~~Most Cupertino residents want more open space, but the idea of having a narrowly focused special purpose district decide Cupertino's growth limit and indirectly affect its public service planning may not be positive.~~ The Cupertino School District Board's independent actions on school closures plays a major role in the City's park planning and affects the social organization of residential neighborhoods designed around neighborhood schools. Regionally, the Association of Bay Area Governments and the Metropolitan Transportation Commission have prepared a joint transportation plan for Santa Clara County. This plan influences future transportation methods and service levels in Cupertino, and, therefore, the intensity of land use permitted on properties in Cupertino's jurisdiction. The Bay Conservation and Development Commission requires counties to prepare waste water management plans that determine the location and extent of future waste disposal sites. The San Francisco Bay Area Air ~~Pollution~~ Quality Control District determines the extent to which industry may emit pollutants into the air, therefore by stopping affecting the activities of certain industries ~~from locating in~~

Cupertino. It influences the extent of all future growth as well, due to the need to comply with the Clean Air Act by reducing vehicle trips.

Key Assumptions of the General Plan

The General Plan's goals, policies, and programs are based not only on the marketplace and governmental constraints just described but on key demographic, economic and social trends. Any major changes in these trends may require the revision of the General Plan. The Plan must be reviewed yearly because these trends can move quickly.

Demographic Assumptions

The fertility rate, which is the number of children a woman will bear, is expected to decreased from about 2.1 in 1970 to about 1.8 1.62 in 1980 ~~the year 2000~~ in the San Francisco Bay Area. The fertility rate then increased each year thereafter, until it reached 2.09 in 1990, where it is projected to stabilize. "Baby boom" children of the post-World War II era are rapidly increasing the number of new households. These trends suggest a continuing high demand by smaller households for new, possibly smaller, dwellings. The persons per household decreased from 2.75 in 1980 to 2.65 in 1990, according to the Association of Bay Area Governments.

~~Cupertino uses the household size factor to estimate future City population. Figure 1-C shows the household sizes for 1975 and the projected 1990 household sizes for various sub-neighborhoods. These household sizes and the population estimates will be a major factor in decisions on providing service to various areas in Cupertino. For example, neighborhood park planning depends primarily on the estimates of future population.~~

Age Distribution

There ~~will be~~ has been a dramatic shift in the percentages of age groups in Cupertino between 1980 and by 1990. Pre-teen and teenage populations ~~will declined~~ while adults and seniors will increased dramatically. The median age in Cupertino was 32 years in 1980 and increased to 36 years in 1990. Age distribution will play a major role in allocating money to meet needs for that age group.

Economic Assumptions

~~Economists identify two broad categories of employment when they speak of large-scale economies such as a city, county, or region. "Basic" employment refers to jobs and workers producing goods and services that go to markets outside the city. "Service" employment serves local needs only. Basic employment is often used as a key indicator of the economic system's wealth and vitality.~~

~~Basic and service employment in Cupertino will increase from about 19,350 in 1977 to about 29,000 by 1990. That projection is based on multiplying current employee-per-acre figures for lands planned for basic industrial employment with lands planned for service-oriented commercial employment.~~

~~It's reasonable to assume that this increase is possible, given the strong growth of the electronics industry in the county, which provides basic employment. It is unclear now whether the housing shortages and high prices and increased congestion will continue to make northern Santa Clara County attractive to industrial development. It's become a trend for electronics companies to move their manufacturing operations to areas with lower labor and housing costs. However, it seems likely that research and development departments of local firms and newer sophisticated electronics industries that require skilled workers will continue to be attracted to the area.~~

By 1900 there will be a demand for about 180,000 sq. ft. of shopping center type retail space, consisting of department stores, clothing stores, specialty stores, fast food restaurants, and personal services, according to an economic study by a consultant. One acre yields about 10,000 sq. ft. of commercial area, so the demand will be limited to about 18 acres. There is room for expansion of highway oriented specialty commercial and office development.

The private sector in Cupertino is dominated by high-tech electronics/computer corporations. The City serves as a corporate headquarters and center for research and development. Virtually no manufacturing takes place in the City, because land and living costs are too high. Representatives of corporate companies indicate that the companies enjoy a competitive advantage by having facilities in Cupertino. This is because highly skilled, highly sought after employees prefer working and living in the Cupertino area, with its moderate size and unique, balanced mix of high technology firms, retail center, open space, quality schools and residential areas.

Cupertino's per capita retail sales compare very favorably with retail sales throughout Santa County, although the gap narrowed in the late 1980's partly due to improvements of nearby shopping centers.

Santa Clara County and the surrounding region is described in a 1992 study, "Joint Venture: Silicon Valley," as having a "a number of significant warnings signs [which] indicate a region out of balance. These include slower employment growth, weaker enterprise formation, a decline in venture capital financing, slow growth in pre-competitive R&D, transportation congestion, and a perceived decline in quality of life." In a special 1991 report on the retail market, the Association of Bay Area Governments describes retail and wholesale trades in the 1990's as a "time of shakedown and lean markets," partly attributable to falling disposable incomes and a weakening California and Bay Area competitive position. These observations lead to the conclusions that economic growth is cyclical and that past economic strength is not guaranteed for the future.

Focusing on the Cupertino market, major companies and the major retail center in Cupertino indicate their interest in remaining and expanding in Cupertino. In general, job growth is expected to increase in the 1990's at a slower rate than the 1980's. The Association of Bay Area Governments' (ABAG) data show that job growth slightly diminished between 1980 and 1990, from 37,239 jobs in 1980 to 37,150 in 1990. Manufacturing and wholesale jobs decreased during this period, while retail and service jobs increased. Manufacturing, which includes research and development, is still the largest sector. ABAG's projections indicate job increases through the 1990's and beyond. Jobs are projected to increase to 41,930 in 2000.

Balancing the City's revenues and expenditures is a factor affecting Cupertino's future. Retail sales tax is a major contributor to Cupertino's revenues, so maintaining and attracting retail business is an important goal. Assuring that new development is a financial benefit to the City is also important, particularly if State funding sources decrease.

Lifestyle Trends

Most Cupertino residents will continue to want to live in single-family homes and drive their cars, reinforcing the suburban nature of the City. However, rapidly increasing housing and land costs, decreasing fuel availability, reliance on the private automobile, and shrinking family sizes may will require a shift to higher-density housing and mass transit.

Assumptions Influencing Public Services

The General Plan assumes that the westerly and southerly boundary of the Urban Service Area will not be expanded in the foreseeable future because of ownership patterns, and the intended use of the properties surrounding the City- the City's interest in city-centered growth and hillside protection.

The Plan also assumes that their there will be no major economic changes that will significantly change the ability of any major service provider to fulfill its function. Finally, the Plan assumes that the City's financial mechanisms will not be limited to a point at which City government would have severe difficulty providing essential services.

Housing Sizes By Planning Area

	1975			1977			1990		
	SF	MF	POP.	SF	MF	POP.	SF	MF	POP.
A-1 & A-2	2.97	1.89	2,005	2.5	1.59	2,100			
B	3.82	2.25	5,185	2.95	1.9	4,335			
C	3.82	2.25	170	2.95	1.9	1,535			
E-1 & E-2	3.33	2.45	6,620	2.75	2.05	7,035			
F-1 & F-2	3.4	1.88	6,430	2.71	1.53	6,160			
G	3.56	1.95	885	2.83	1.59	720			
H-1 & H-2	3.57	2.24	4,625	2.98	1.9	4,265			
I-1 & I-2	3.65	2.49	5,460	2.99	2.32	6,045			
J-1 & J-2	3.16	1.97	1,795	2.65	1.66	1,390			
K	3.16	1.97	4,455	2.65	1.66	3,735			
L-1 & L-2	3.63	2.34	4,920	2.95	2.34	5,680			
M	3.4	1.37	5	2.85	1.16	5			
N	3.82	2.25	0	2.95	1.9	510			
O	3.51	2.21	1,645	2.95	1.9	1,635			
P-1 & P-2	3.51	2.21	3,075	2.95	1.9	1,745			
TOTALS			47,275			46895			

Major Proposals

1. ~~Guide land use and urban design to create a community focal point and to create a more pleasing environment, especially in shopping areas next to Stevens Creek Boulevard and North De Anza Boulevard.~~
2. ~~Reduce the harm caused by traffic on the quality of life in Cupertino, especially in the residential neighborhoods.~~

3. ~~Preserve the quality of residential neighborhoods and increase dwelling unit densities in the center of Cupertino so that there will be more housing opportunities for people who work in Cupertino.~~
4. ~~Protect and enhance the unique scenery, plants, trees, and recreational opportunities in the City's hillsides and streambeds.~~
5. ~~Regulate development to reduce risk to life and property of flooding, fire, landslides, and earthquakes.~~
6. ~~Create more effective government through greater service efficiency and by encouraging greater self-reliance.~~

A VISION FOR CUPERTINO

The General Plan envisions a future for Cupertino in which our growth is carefully managed to maintain and enhance our quality of life, protect our natural heritage, and ensure long-term economic vitality. The following details a vision for Cupertino and describes its major goals.

A LIVABLE COMMUNITY

In order to create a focal point for the community, Cupertino should focus planning and investment toward creation of a city core. The City core would serve as the physical, social, and cultural center of the city. The core manifests itself in the form of a revitalized retail and service sector, new restaurants, higher density housing, public transit linkages along Stevens Creek and De Anza Boulevards, and public open spaces/gathering areas.

The city core should facilitate social contact, provide good pedestrian and bicycle access, and foster the atmosphere for a night life. It should be an aesthetically pleasing area with ample landscaping, lighting and street furniture. The core is pedestrian oriented with street level businesses, outdoor sidewalk vendors, or cafe-style eateries, bicycle paths, and urban open space as key community gathering places. The core will be a destination area rather than a traffic thoroughfare.

Cupertino shall work with neighboring cities in partnership to find solutions to regional housing needs. Cupertino will pro-actively pursue opportunities to build greater numbers and varieties of housing within the city. This would be the key to providing housing that meets the needs of all Cupertino citizens; including young families, seniors and such vital employees as teachers, public safety officers, service providers, technical support, and manufacturing personnel. Additionally, future housing should reflect the expected affordability range for Cupertino business employees.

All new housing should meet strict design standards for landscaping, open space and attractive, high quality architecture, and be sensitive to the impact on existing neighborhoods. New development in historical areas, such as Monta Vista, must protect traditional character.

New residential development must foster neighborhoods, providing greater opportunity for community identity and interaction within neighborhoods. New neighborhoods should be inviting to enter by foot and bicycle, and should not be dominated by motor vehicle design elements.

Cupertino shall include the educational needs of its youth and consider schools as a service of the City core. The outstanding quality of the public schools in Cupertino contributes significantly to the quality of the community. The excellence and vitality of the public education system must, therefore, be maintained as our schools increasingly become the focal point of education, health, recreation, and human and social services.

PRESERVE AND ENHANCE OUR NATURAL HERITAGE

Protecting and enhancing Cupertino's natural resource lands will ensure three critical goals:

1. Control urban sprawl and enhance efforts to build more compact and transit-compatible residential and commercial developments in the city core and along new public transit corridors.
2. Protect the ecological integrity of critical wildlife habitat and watershed lands.
3. Provide for recreational opportunities for Cupertino and area residents.

The foothills within Cupertino's planning area are an important link in the regional Bay Area Greenbelt and the local Greenbelt along the Santa Cruz Mountain range. Cupertino shall achieve a continuous Greenbelt of public and private lands to form a permanent urban growth boundary. This Greenbelt will link Steven Creek Park, Deep Cliff Golf Course, McClellan Ranch Park, Blackberry Farm and Rancho San Antonio.

Cupertino shall aggressively seek state and local funds to purchase lands where needed, and explore the use of transfer of development credits and conservation mitigation fees on some types of developments as a means of permanently protecting valuable open space, while protecting the rights of individual property owners.

Cupertino shall enter into a joint agreement with the County to govern the lands within its Sphere of Influence, aimed at preserving sensitive views and ridgelines by strengthening design guidelines and standards for hillside development. High priority will be given to the protection of sensitive riparian and canyon areas.

For lands outside of the Urban Service Area and within the city's Sphere of Influence, Cupertino shall reaffirm its intent to maintain the County's protective hillside zoning. Hillside or other environmentally sensitive land within the urban service area shall be zoned and regulated appropriately. For these lands, the highest priority shall be to protect the land in its natural condition and promote those uses which support and enhance a rural character, and preserve important natural resources such as natural vegetation, animal habitat, scenic beauty, recreational areas, open space and public access. Land use policy should ensure public safety, health and welfare by avoiding development on or near areas of natural hazards or environmentally sensitive areas such as geologically unstable areas, watersheds, riparian corridors, wildlife habitat and community viewsheds.

Cupertino residents and others should have access and linkages to parks and open space through bicycle paths and walkways. All new development should be evaluated to ensure that access and linkages to and between parks and open space is maintained.

In order to achieve the above goals, Cupertino should not expand its urban service area within the time frame of this General Plan.

ACHIEVE ECONOMIC DIVERSITY AND SUSTAINABILITY

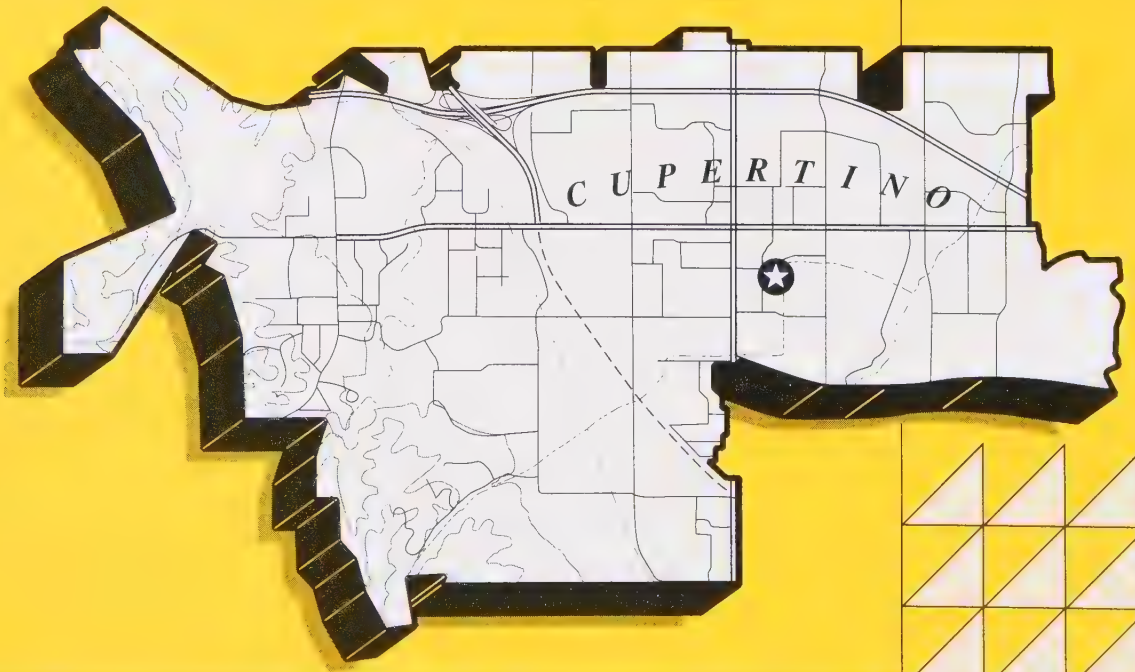
Cupertino strives for an economically sustainable business community. The city should foster the development of new markets and a diversity of economic growth that will provide long term economic stability for the city. In order for businesses now located in Cupertino to remain here in the long term, the city should allow higher density land uses in business areas in close proximity to public transportation. The city should allow reasonable growth and expansion within identified areas. The city and employers, working together, shall mitigate the adverse impacts that can, at times, accompany business expansion.

Cupertino shall continue to encourage and welcome corporate participation in community affairs, particularly in the promotion of housing and public transportation. The city shall work with business to address the jobs/housing balance resulting from business expansion and job growth in Cupertino. Similarly, the city shall strengthen its commitment to retaining a workforce necessary to sustain a healthy business climate by implementing policies designed to attract and retain business in Cupertino, while encouraging responsible business growth.

At the same time Cupertino works to foster economic growth and diversity, the city must determine an appropriate rate and amount of growth so that growth enhances rather than detracts from the quality of life. Cupertino should define a balance of growth that benefits the overall community.

Adopted by the City Council

June 9, 1992



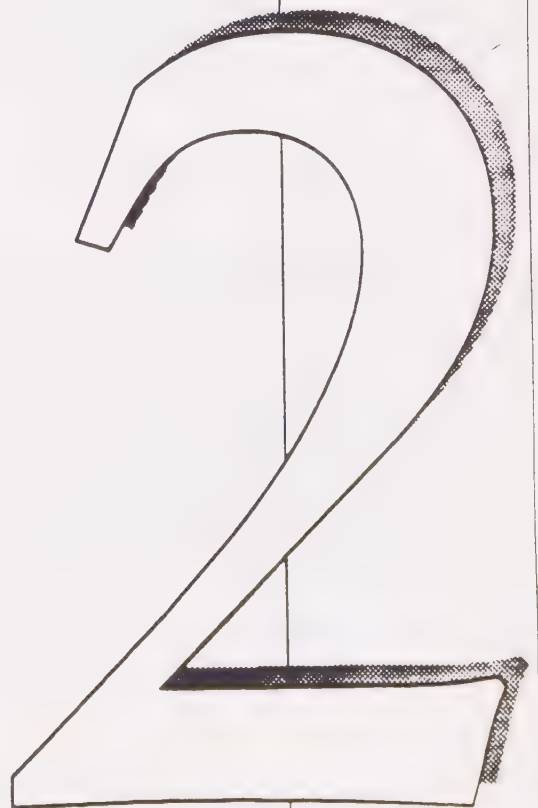
Land Use/Community Character



INSTITUTE OF ENVIRONMENTAL
STUDIES LIBRARY

FLEET

UNIVERSITY OF CALIFORNIA



INTRODUCTION

Land use planning arranges activities within the community to achieve harmony between differing uses and protect public health. Planning must consider the effects on property values, the profit potential for business and manufacturing, and maintenance of a strong tax base for government and school operation.

This Element unifies the other elements of the General Plan and is the standard by which proposed policies are tested for logic and consistency. It points the way for other principles of public policy. Here are two examples. The Housing Element's policy of increasing the supply and variety of housing is related to density limits for residential land in this Element. The City's organizational plan for the transportation network, as outlined in the Circulation Element, must follow the principles of site accessibility and scale of development intensity set forth in this Element.

COMMUNITY CHARACTER

Cupertino has a special community character, a physical setting and visual image that makes the City stand apart from its neighbors and contributes to the quality of life and sense of place enjoyed by people who live and work here. Residents often appreciate cities for their appearance and the way they are organized for use and enjoyment.

The goal of this Element is to help public and private efforts ~~to keep~~ maintain and improve Cupertino's community character by applying design policies and principles to refine the City's image, avoiding visual contradictions that come from unguided development, and protecting irreplaceable natural resources.

Major Issues and Goals

Cupertino was incorporated in 1955; since then, it has grown to the point that it can be considered developed. The transportation network is nearly complete and the City's jurisdiction is fairly well settled.

Cupertino will expand mostly on scattered vacant sites. This development must reflect the character and density of established neighborhoods. Other City development is likely to occur in areas with outmoded and underdeveloped land uses which will be replaced by private redevelopment activities. Local concerns and County and regional urbanization will continue to influence decision making.

This Element and its recommendations and policies are based on seven issues, each of which will be discussed at length later in this Element.

A. Community Identity

Cupertino is located in a broader urban area, the Santa Clara Valley. City boundaries blur unless distinguished by unusual land forms or built features. ~~The geographical and historical center of Cupertino, the Town Center/Crossroads area, is only partially developed and represents an opportunity to create an identifiable downtown at the very heart of the City.~~ The City's activity centers: De Anza College, Town Center/Crossroads and Vallco Park are situated along Stevens Creek Boulevard. Vacant or partially developed sites along or near Stevens Creek Boulevard represent an opportunity to create an identifiable downtown for Cupertino.

B. Regional Distribution of Jobs and Housing

Jobs are concentrated in northern Santa Clara County; most homes are in south Santa Clara County. Commute traffic congests major streets and is starting to spill over into local streets and divide neighborhoods.

C. Housing Demand

Cupertino wants to house residents of all income levels. Expensive single-family houses on large lots have been built by the private market at the cost of other forms of housing. Rental ~~or cluster~~ and denser forms of housing may serve people whose households and lifestyles don't fit into big, expensive houses.

D. Traffic Management

This Element must balance the need to control development so it won't overwhelm the road system against the need for a sound economic base.

E. Urban Fiscal Balance

The land use mix must support public service by generating enough revenue and the development must be arranged for efficient servicing. Fiscal zoning priorities may clash with other community goals including providing housing for all income levels and supplying non-emergency City services such as parks, recreation, and library.

F. Environmental Management

Land that can be developed is in high demand. Unless there are fair but firm restrictions to protect the public interest, health, and safety, this demand threatens the natural and visual resources of Cupertino. There are several features that are essential elements of the character of Cupertino and must be protected and preserved. Views of the wooded hillsides of the Montebello Ridge of the Santa Cruz Mountains give the City a green backdrop. The streamside environment of the Stevens Creek Flood Plain and significant mature specimen trees must be considered carefully in the urban context.

G. Human Comfort and Community Diversification

As traffic congestion gets worse and neighborhoods become more crowded, it's more important for government to protect the physical and mental health of residents from these intrusive effects of urbanization. Social interaction and personal privacy in living spaces and in the City at large must be balanced. The City must also offer a variety of educational, entertainment, and cultural experiences throughout the day for continuous community vitality.

COMMUNITY IDENTITY

The General Plan provides a blueprint for growth in Cupertino which maintains and enhances the quality of life, protects the City's natural heritage and ensures long-term economic vitality. This can be accomplished by creating land use controls that enhance Cupertino's natural hillside setting, and shape the built environment and provide for economic development.

~~Cupertino is located in western Santa Clara County, bordered by Los Altos, Sunnyvale, Santa Clara, San Jose, and Saratoga and by the green Santa Cruz Mountains to the west.~~

Goal A: Create a sense of place in Cupertino by encouraging a development pattern that promotes the urban environment with unique land forms and features that satisfy the economic, social, and esthetic needs of its residents.

Figure 2-A is an urban design overlay that establishes the fundamental direction for this element. It defines the appearance and dominant activities of the desired land use pattern. The diagram defines high-intensity nodes in Town Center and Vallco Park connected by lower-intensity heavily landscaped suburban office and commercial centers. A pedestrian-oriented downtown, the Heart of the City, containing a mixture of land uses, is planned on or near Stevens Creek Boulevard. The outdoor private recreation and De Anza College campus form a green edge on the west side of Stelling Road to define the extent of office and commercial development and the transition to less intense land uses in the western half of the City. The diagram also describes the hillside backdrop and Stevens Creek stream corridor, both of which establish the character of the City. The design concepts are refined in the design policy section.

Vallco Park and the industrial complex on North De Anza Boulevard are already intensely urban. Town Center has potential for new urban activity. All three of these areas have the potential for highly sophisticated building forms to enhance Cupertino's natural skyline; this will advance the long sought-after goal of breaking up the current pattern of commercial strip development.

Housing near major boulevards offers an opportunity to increase streetside landscaping and experiment with interesting juxtapositions of architecture. Reserving space near major streets for housing or open space says that Cupertino wants to diminish the automobile's claim on disappearing vacant urban land and that the community identity depends on an around-the-clock population for a vital downtown. By providing for and encouraging a balanced mix of land uses and intensities, the City can achieve a whole and complete community.

Policy 2-1: Diversity of Land Use

Provide adequate land area for employment, housing shopping, entertainment, cultural activities, health care, and personal services, and recreation and open space. Encourage mixed use development of commercial/office and housing.

Strategies

1. **Regional and Shopping Node in Vallco Park.** Provide for a regional employment and shopping node within the Vallco Park planning area.
2. **Link Public Open Space Nodes in Neighborhoods.** Open space nodes within individual neighborhoods should be linked visually and physically to their surroundings to facilitate pedestrian and bicycle access and to help defeat the "barrier" effect of travelways.
3. **Neighborhood Retail Vitality.** Encourage the economic vitality of existing neighborhood retailing uses through selective zoning of new centers, and through careful definition of permissible uses.
4. **Encourage Diverse Evening Pursuits.** Encourage diverse activities, including evening hour services for entertainment, cultural and educational pursuits.

Cupertino is unusual in that it has no identifiable downtown and that most of its available commercial property is along Stevens Creek Boulevard, in the center of town. ~~This is an opportunity to create a large-scale focal point~~ While Cupertino has numerous amenities and activity centers, they are located in dispersed locations throughout the City. There is no central focal point that creates a sense of place and serves as a source of City identity. The "Heart of the City" concept represents a challenge to create a central focal point, a downtown that reflects Cupertino's character in a uniformly planned mixture of stores, housing, and public facilities.

Goal B: Create a positive and memorable image of Cupertino by developing a Heart of the City on or near Stevens Creek Boulevard and visually and functionally linking the major activity nodes on Stevens Creek Boulevard from Highway 85 to the eastern City limits.

Policy 2-3: ~~Town Center~~ Heart of the City

Coordinate the efforts of private property owners ~~in Town Center~~ on or near Stevens Creek Boulevard to plan and create a community focal point that expresses the character of Cupertino through a diversity of uses, serving City residents and scaled for pedestrians.

Strategies

1. Piecemeal Development along Stevens Creek Boulevard. ~~in Town Center, the East Stevens Creek Boulevard and Crossroads Shopping District planning areas.~~ Restrict piecemeal development ~~in Town Center~~ along Stevens Creek Boulevard and adjacent areas until the City has adopted a ~~comprehensive conceptual~~ specific plan for the ~~district in cooperation~~ area by means of a broad-based, citywide planning process in participation with property owners, business, community groups and interested citizens.
2. Heart of the City: Stevens Creek Boulevard Specific Plan. Prepare a Specific Plan for Stevens Creek Boulevard whose objective is to create an environment which links activity nodes and creates a Heart of the City. The Heart of the City represents a unique pedestrian-oriented activity center which will be a positive and memorable gathering place for Cupertino citizens. The Heart of the City shall be located on or near Stevens Creek Boulevard between Route 85 and Tantau Avenue. The area of the heart shall be limited to make it unique. The plan shall include the following elements:
 - a) A land use plan specifying the type and arrangement of land uses to promote pedestrian and business activity. Housing is strongly encouraged along the boulevard.
 - b) A design plan which provides for a pedestrian streetscape for the heart and vehicular streetscape for the remaining sections of Stevens Creek which link De Anza College the Heart, City Center and Vallco Park. The design plan shall contain guidelines that foster pedestrian activity, a sense of arrival and neighborhood protection.
 - c) A traffic management plan that examines intersection performance, incorporates pedestrian and bicycling activities, and provides for future mass transit.
 - d) A detailed financing component that examines infrastructure costs and strategies for funding.

An urban parkway to the Heart of the City should be developed to create a sense of arrival. New development fronting shall orient to the street with small front setbacks. Median and property frontage landscaping should unify the parkway effect.

The Crossroads intersection should be developed with a distinct signature to mark its noted City prominence. Such improvements may include the siting of landmark buildings, street monuments or other public art works, landscaping and special pavement.

COMMUNITY DEVELOPMENT

Development Regulation

Historically Cupertino has regulated development intensity in non-residential areas to limit traffic congestion and control the intensity of building forms. This regulation was mainly accomplished in two ways:

Land Use Height and Intensity Limitations

Figure 2-A schematically defines the desired land use pattern. The land use diagram, which is attached in the rear jacket, gives a more specific description of permitted land use including intensity of use for residential areas. The intensity of use, including height and building area for industrial and commercial activities, is defined by the area plans described below and by other policies contained in this document.

Although development intensity is controlled by height and setback requirements, the most direct means to control intensity is by regulating the amount of building area allowed on a specific site. The Cupertino land use element directly regulates this in two ways:

Floor Area Ratios (FARs): This determines buildable floor space by multiplying a specific value (.25, .33, ...) times lot area. In the upper portion of Figure 2-B, a conceptual one-story building is shown based on a series of FAR values. The lower portion of the figure illustrates that FARs limit only the total building area, but do not necessarily dictate the shape or height of the structure.

Traffic Intensity Performance Standard (TIPS): This regulates land use intensity in a manner which prohibits a development from exceeding a specific vehicular trip rate. The standard limits activities to those that do not exceed 16 one-way trips per acre.

The TIPS policy is was generally applied to the North De Anza Blvd. and East Stevens Creek Boulevard areas. Shopping centers that existed before December, 1973, when the "Core Area" General Plan amendment was passed, ~~are~~ were exempted from the TIPS policy. The FAR policy amendment, adopted in July 1983, was applied to all remaining commercial, office and industrial zoned properties not subject to TIPS. Land-use intensity in the Town Center area is was regulated by a specific traffic generation accounting system based on ~~described in the Town Center planning area description~~ a specified combination of land uses..

Commercial, office, and industrial land uses in the rest of the community are regulated by a FAR. The specific FAR standards are identified in the area plans and general intensity policies described below.

Other features of the FARS and TIPS policies included the ability of private property owners to transfer "unused" FAR or TIPS to other properties with prior City approval and the allowance of residential dwellings above FAR limitations in non-residential areas but not in TIPS - governed areas.

These policies had numerous effects on the City. Non-residential building patterns have typically been low profile and uniform in height, making it difficult to focus development intensity to shape the City's built form and identity. Imbalances in commercial, office/industrial and residential development potential in relation to market demand have resulted in under utilized commercial spaces, low office vacancies and high housing demand.

To address these issues, the development regulatory policies are revised as follows:

Policy 2-4: DEVELOPMENT REALLOCATION

Development activity should be controlled so that the City street system is not overwhelmed with traffic and the desired transportation level of service is maintained. To meet the City's goals and priorities, the remaining uncommitted development potential that achieves the City's transportation goals should be reallocated as shown below. Further adjustments to these allocations may be necessary to ensure that the City's transportation goals are met. Socially beneficial development may be considered in addition to these allocations, providing that traffic, housing and other impacts are evaluated and mitigated if necessary.

PLANNING COMMISSION DEVELOPMENT REALLOCATION TABLE

<u>Land Use</u>	<u>1990 Built</u>	<u>Committed *</u>	<u>Uncommitted Remaining Net Growth</u>	<u>Re- Allocation</u>	<u>Trip Factor</u>	<u>Trips/1000 sq. ft. Room or DU</u>
Retail (sq. ft.)	<u>3,355,000</u>	<u>573,000</u>	<u>809,000</u>	<u>500,000</u>	<u>2.60</u>	<u>1,300</u>
Office/Ind (sq. ft.)	<u>7,535,000</u>	<u>541,000</u>	<u>1,100,000</u>	<u>1,361,000</u>	<u>1.70</u>	<u>2,314</u>
Hotel (rooms)	<u>277</u>	<u>250</u>	<u>300</u>	<u>500</u>	<u>0.40</u>	<u>200</u>
Housing (DU)	<u>17,460</u>	<u>584</u>	<u>1,008</u>	<u>2,000</u>	<u>0.80</u>	<u>1,600</u>
						<u>5,414</u>

*Committed growth refers to growth potential, resulting from the construction of developments with approved use permits and development subject to vesting maps or development agreements. The committed space will be transferred to uncommitted if a use permit expires or the use is determined to be inconsistent with the General Plan.

This policy recognizes that a finite amount of development can take place and still remain within the capacity limits of the transportation network for the desired transportation level of service. The uncommitted development potential from less than buildout properties would be "reallocated" to meet City development needs and goals. Development allocations shall be made by the City in accordance with its development approval processes and the following development priorities tables. The "Development Intensity Manual" will be modified to provide detailed procedures regarding development allocations.

Strategies

1. The City will modify existing Planned Development zones and area plans and/or develop new specific plans to "freeze" building areas on each commercial retail zoned or used property as of (adoption date). Future commercial retail growth can occur in areas that are allocated retail growth.
2. The commercial retail space may be allocated as follows:

Commercial Development Priorities

<u>• Along or near Stevens Creek Boulevard to support the Heart of the City policy.</u>	<u>250,000 sq. ft.</u>
<u>• Remodeling and development of major retail centers on 5+ acre sites outside of the Heart of City and on major arterial streets.</u>	<u>40,000 sq. ft.</u>
<u>• Mixed use developments with residences outside of the Heart of the City.</u>	<u>35,000 sq. ft.</u>
<u>• Development or revitalization of other commercial parcels.</u>	<u>50,000 sq. ft.</u>
<u>• Power Retailer (i.e. high volume discount retailer)</u>	<u>125,000 sq. ft.</u>
<u>• Full service hotel(s), appropriate location evaluated at time of proposal</u>	<u>500 rooms</u>

For commercial properties, transfers of trips defined by the TIPS policy approved prior to General Plan adoption remain valid and are exempted from reallocation.

3. Office, Research and Development and Industrial space listed in the Development Reallocation Table may be reallocated as follows:

Office/Industrial Development Priorities

• Development potential based on pre existing FAR restraints and TIPS standards remains 1,100,000 sq. ft. with existing office and industrial parcels.

• Town Center & Crossroads Corners 111,000 sq. ft.

• Non-designated Pool to be allocated based on the following priorities: 150,000 sq. ft.
Company with 1,500+ employees
Company with City corporate headquarters

Property owners possessing bonus square footage authorized by the 1983 General Plan retain such square footage.

4. Housing units listed in the Development Reallocation Table may be reallocated as follows:

Residential Development Priorities (See Housing Reallocation Map)

• Residential density potential based on existing general plan residential land use designations remains with existing residential parcels. 516

• North De Anza Boulevard Area 150

• Vallco Park 500

• Stevens Creek Boulevard between Torre Avenue and Saich Way, including the Town Center Planning Area 300

• Remainder of Stevens Creek Boulevard between Route 85 and eastern City limits 200

• Bubb Road between Stevens Creek Boulevard and McClellan Road 150

• Undesignated Pool 184

Housing in the North De Anza Boulevard and Bubb Road areas shall generate no more peak hour traffic than the office/industrial uses it replaces.

5. More refined criteria for evaluating projects which request a share of these allocations shall be developed.
6. The square footage room and dwelling unit allocations of the development priorities tables may be reviewed by the City on an annual basis to ensure that the development priorities meet City needs and goals.

~~Policy 2-5: FAR Credit Transfer in Core Area:~~

~~Allow Core Area properties designated for commercial, office, industrial land, or any combination of these to transfer Floor Area Ratio Intensity Credit from one owner to another. In this case, a Core Area property is one that fronts De Anza Boulevard from Bollinger Road to Homestead Road and Stevens Creek Boulevard from Stelling Road to the eastern Cupertino limits. Apply this policy to properties that do not adjoin to these streets but are part of a shopping center or planned industrial and office center that does adjoin these streets.~~

~~Ensure that properties involved in the transfer are zoned Planned Development and that the degree of transfer is determined based on the permitted land use intensity of the transferring site.~~

.Special Planning Areas

Town Center

Function: A large-scale focal point for Cupertino in the City's geographical and historical center.

Location: The southeast quadrant at the intersection of De Anza and Stevens Creek Boulevards.

Development Activities: Offices, stores, entertainment businesses, housing, cultural facilities and restaurants will be contained in buildings with varied form, combined with generous plazas. ~~The Cali Mill could be replaced by landmark multiple-story buildings with a variety of shapes if traffic studies find this to be feasible.~~ Vertically mixed use buildings and government offices are strongly encouraged. A 250- room hotel complex has been previously approved.

Town Center developers are encouraged to submit development proposals which incorporate, to the greatest extent possible, the maximum number of dwelling units designated in Table 2-A, allowed by the General Plan.

The maximum 45,000 sq. ft. of non-residential space designated for ~~Site-B~~ the site easterly of Torre Avenue shall be service oriented professional office and/or community or local retailing activities.

Building Heights: ~~Maximum of eight stories.~~ —The maximum building height is defined by the City Center twin towers. Maximum building height in other portions of this planning area is defined by the heights listed in the building heights table.

Development Intensity: ~~Regulated by the trip end distribution described in Table 2-A, See development priorities tables. with 300,000 sq. ft. additional floor space above that trip distribution, and a maximum 250-room hotel complex.~~

Table 2-A. Town Center Planning Area Trip Accounting By Major Ownership

SITE A — Prometheus Development Co.

Trip Credit:

26.11 ac. @ 16/ac. = 418 Trips

Trip Generation:

USE	FACTOR	TRIPS
Office	339,000 sq. ft. 1/1K sq. ft.	339 Trips
Residential	158 DU .5/DU	79 Trips
TOTAL		418 Trips

SITE B — De Anza & Town Center Properties

Trip Credit:

14.11 ac. @ 16/ac. = 226 Trips

Council Resolution 6136 = 3 Trips

TOTAL = **229 Trips**

Trip Generation:

Alternative 1

USE	FACTOR	TRIPS
Office	45,000 sq. ft. 1/1K sq. ft.	45 Trips
Residential	366 DU .5/DU	183 Trips
Elderly	0 DU .18/DU	0 Trips
TOTAL		228 Trips

Alternative 2

USE	FACTOR	TRIPS
Office	90,000 sq. ft. 1/1K sq. ft.	90 Trips
Residential	276 DU .5/DU	138 Trips
Elderly	220 DU .18/DU	40 Trips
TOTAL		268 Trips

SITE C — Lincoln Properties/Pinn Bros.

Trip Credit:

7.0 ac. @ 16/ac. = 112 Trips

Trip Generation:

USE	FACTOR	TRIPS
Office	91,000 sq. ft./1K sq. ft.	= 91 Trips
Residential	42 DU .5/DU	= 21 Trips
	TOTAL	= 112 Trips

Total Trips Credited

47.26 ac. @ 16 trips/ac. = 756 Trips

1 Site "A" credited with 300,000 sq. ft. beyond trip credits plus maximum 250 room hotel complex.

2 DU = Dwelling Unit.

Vallco Park

Function: Mixed use, highly urbanized regional commercial and employment center.

Location: Area bounded by Wolfe Road, Stevens Creek Boulevard, Homestead Road and the easterly City limit line.

Development Activities: Vallco Fashion Park, the multiple-story financial center, and the high-rise corporate office building are in place. A hotel complex, ~~with a maximum of 1,000 rooms,~~ a conference/convention center facility and related shops/services and additional office, industrial, residential, and other ancillary uses may be located in the Vallco Park Planning Area.

Building Heights: ~~Generally not to exceed eight stories with the exception of the hotel, which is unspecified. Buildings may exceed normal height limits to emphasize Vallco Park's role as a major center. Final approved heights of all buildings, including the hotel, will be determined along with development applications. See building heights table.~~

Vallco Park (continued)

Development Intensity: Intensity is regulated by the following floor area ratios:

Commercial	.25 FAR
Office	.37 FAR
Industrial	.33 FAR

The "Lester" property located in the northeast quadrant of Tantau Ave and Stevens Creek Blvd. and the "Old Hotel Site" located in the southeast quadrant of Pruneridge Ave and Wolfe Road have no FAR development credits potential because development intensity was transferred to other sites.

The Vallco Fashion Park regional shopping center site is allocated 535,000 sq. ft. of additional mixed use commercial, office, industrial, and or hotel building space above the 1,110,700 sq. ft. of space which existed on July 1, 1991. The precise mix of land uses shall be determined via an approved use permit.

Vallco Park Ltd. is allocated 450,000 sq. ft. of additional office and industrial space over and above the building areas allowed by designated FARs. The additional building area may be allocated to areas located east of Wolfe Road, south of Pruneridge Ave, and north of Stevens Creek Boulevard. Vallco Park Ltd. is encouraged to seek agreement from non-Vallco Park owners regarding the allocation of the additional space.

Additional square footage and dwelling units may be approved by the City using the development priorities tables.

North De Anza Boulevard

Function: Business office and research and development activity with some stores.

Location: Properties between Stevens Creek Boulevard and Interstate 280 on North De Anza Boulevard.

Development Activities: Mixed use commercial, office, industrial, and residential.

Building Heights: ~~Maximum of four stories.~~ See building heights table.

Development Intensity: ~~Regulated by the 16 one-way TIPS.~~ See development priorities tables.

~~East Stevens Creek Boulevard~~

Function: Mix of commercial retail centers and general office buildings. Mixed use housing developments are permitted.

Location: ~~Stevens Creek Boulevard east of De Anza Boulevard~~ Stelling Road ~~and west of Stern Avenue on the~~ to the east City limit line.

Development Activities: Retail, offices and mixed use projects that include housing are preferred but retail is allowed. Regulated by the 16 one-way TIP standard.

Building Heights: ~~One or two stories in the Stevens Creek office corridor east of De Anza Boulevard with some buildings as high as three stories, if the additional height can be found to add diversity and interest to the~~ 30 to 45 feet depending on distance from adjacent residential neighborhoods. structure and does not hurt surrounding land uses, especially residential districts. Taller buildings up to 60 feet may be allowed at the Crossroads corners (De Anza and Stevens Creek Boulevards), except the southeast corner.

Development Intensity: Existing and zoned office uses have a base development entitlement of .37 FAR. Commercial development requires a development allocation.

~~Crossroads Shopping District~~

Function: ~~Original shopping district in Cupertino.~~

Location: ~~Properties fronting Stevens Creek Boulevard between De Anza Boulevard and Stelling Road.~~

Development Activities: Housing is the preferred land use for all properties westerly of Saich Way and the former post office building. Retail is preferred but offices are allowed.

Building Heights: ~~One or two stories, with some parts of buildings as high as three stories, if the additional height can be found to add diversity and interest to the structure and does not hurt surrounding land uses, especially residential districts.~~

Development Intensity: ~~Regulated by a Floor Area Ratio of .25 for commercial and .37 for offices.~~

Monta Vista

Function: Monta Vista is the commercial and residential district that predates Cupertino's incorporation. The commercial district should serve as a commercial center for Monta Vista and its adjoining neighborhoods. Residential use areas should be retained and enhanced.

Location: The commercial area includes the north and south sides of Stevens Creek Boulevard from the Southern Pacific right-of-way to Byrne Avenue and from Stevens Creek Boulevard south to Granada Avenue and from Orange Avenue to the Southern Pacific Railroad right-of-way.

The residential areas south of Stevens Creek Boulevard are bounded by Granada Avenue to the north, Byrne Avenue to the west, Imperial Avenue to the east, and McClellan Road to the south. The residential area north of Stevens Creek Boulevard is bounded by University Avenue to the north, Peninsula Avenue to the west, Alhambra Avenue to the east, and Stevens Creek Boulevard to the south.

Monta Vista (continued)

Development Activities: Mixed use commercial, office industrial, and residential on Stevens Creek Boulevard. Balance of area is designated for a variety of residential types and densities. Refer to Area Plan inset on Land Use Map.

Building Heights: Two-story buildings with some three-story elements.

Development Intensity:

Policy 2-6: Land Use Intensity Regulation by FAR

Regulate land use intensity for properties described in Figure 2-C by a .33 Floor Area Ratio for both industrial and commercial and office activities. Regulate Development intensity for other non-residential use areas by the FARs for the rest of the community. requires a development allocation.

Policy 2-7: Commercial Blight and Noise Intrusion

Work to ensure that blight and noise from commercial and industrial uses do not intrude upon residential neighborhoods.

Policy 2-8: Interconnected Access, Shared Parking of Individual Properties

Ensure that individual properties developed independently of surrounding sites have interconnected pedestrian and vehicle access and shared parking.

Policy 2-9: Housing Units Removed Under Eminent Domain

Require that housing units removed under eminent domain proceedings be replaced on a one-for-one basis within the same geographical area and that the people who were displaced can afford the units.

Policy 2-10: Architectural Barriers

Eliminate architectural barriers to pedestrian mobility.

Policy 2-11: Residential Street Improvements

Maintain a semi-rural appearance with residential street improvements.

Policy 2-12: Neighborhood Landscaping

Preserve existing neighborhood landscaping features during redevelopment. Emphasize on-site parking instead of street frontage parking.

Policy 2-13: Mixed-Use Development

Allow mixed-use development within the area bounded by Granada Avenue, Stevens Creek Blvd., Orange Avenue and the SP right of way to rely on public parking on Pasadena and Imperial Avenues to meet the off-street parking needs for the commercial part of the project.

Policy 2-14 Storefront Appearances

Require commercial and office structures to exhibit a traditional storefront appearance to the public street. Require buildings intended for initial office use to be designed to accommodate future entrances from the sidewalk for retail shops. Do not permit the building to be separated from the public sidewalk by extensive landscaping or changes in elevation.

~~Catholic Church Property~~

~~Function:~~ The approximately 735 acre property consists of lands designated for quasi-public/institutional, residential, and park uses.

~~Location:~~ South of Interstate 280 and west of Foothill Boulevard. The planning area is served by Cristo Rey Drive and is contiguous to and northerly of Stevens Creek Boulevard.

~~Development Activities:~~ A retirement facility which was approved as an institutional land use was approved on a 54 acre parcel in this area. The facility consists of 275 group quarters, 60 independent living, 75 personal care units and 100 beds. Residential development is possible on approximately 237 acres consisting of the St. Joseph's and Maryknoll Seminaries and lands surrounding Gate of Heaven Cemetery.

Approximately 362 acres have been sold to the Open Space District and Santa Clara Park system, approximately 58 acres were incorporated into the Gate of Heaven Cemetery and approximately 29 acres are currently utilized by the Maryknoll Seminary.

~~Development Intensity:~~ Land use intensity for this area is based on the 1/2 acre foothill modified slope density described on the land use map. The maximum number of dwelling units shall not exceed 400 for the entire planning area. The 400 unit maximum was based on a traffic capacity standard for Cristo Rey Avenue.

The 400 unit maximum was reduced by 107 units in 1985 as a result of the approval of the retirement facility. The slope density analysis for the 54 acre retirement facility resulted in a slope density yield of 107 dwellings. The reduction of the 107 unit slope density credit for the retirement facility results in a maximum remaining development potential of 293 units. The retirement facility development was not considered as a residential project; therefore, the retirement quarters are not subtracted from the 400 unit maximum. A traffic study was performed which indicated that the retirement facility created approximately the same number of trips generated by 107 single family residences had they been built.

Merriman and Santa Lucia Roads

Function: The area, subdivided in 1917, has duplexes and single-family homes. To recognize standing viable duplexes, legally constructed duplexes may remain in the section of the planning area that is planned for up to five units per acre and will be rezoned to a duplex zoning district.

Location: Bounded by Santa Lucia Road, Alcalde Road, and Foothill Boulevard.

Balance of Commercial, Office, and Industrial Areas

Building Heights: Two stories, with some parts of buildings as high as three stories, if the additional height can be found to add diversity and interest to the structure and does not hurt surrounding land uses, especially residential districts.

Development Activities: Refer to Land Use Map.

Development Intensity: ~~Regulated by Floor Area Ratios of .25 for commercial,~~ See development priorities tables .33 FAR for office, and .33 FAR for industrial.

HOUSING

Goal D: Enhance and protect the integrity of residential neighborhoods.

The private housing market is now geared to big, expensive homes on large lots to the exclusion of higher-density housing. Since the type of household attracted to live in a city is dictated by the available housing, this trend will discourage households with ~~other interesting~~ different lifestyles from living in Cupertino and adding to its vitality.

Policy 2-26: Full Range of Housing Opportunities

Provide for a full range of ownership and rental housing unit densities, including apartments and other high-density housing.

Strategies:

- 1. Conversion of Commercial Lands to Residential.** Encourage conversion to residential use of lands designated to be commercial, subject to consideration of design and existing neighborhood character and municipal services and utilities.
- 2. Residential Property Development At Upper Limits.** ~~Encourage~~ Require development of residential properties at the upper limit of the permitted dwelling unit intensity range if the neighborhoods are adequately protected from noise, traffic, light, and visually intrusive effects from the development.

3. **Residential Development Exceeding Maximums.** Allow residential developments to exceed planned density maximums if they meet a special community social goal and the increase in density will not overload neighborhood streets or hurt neighborhood character.

Policy 2-27: Housing with Other Development

Consider housing along with non-residential development, permitting it in addition to the ~~Floor Area Ratio established for non-residential development.~~

Cupertino, like most cities, is organized into neighborhoods. Some neighborhoods have a large variety of activities and others have fewer. Any neighborhood must be planned carefully to be sure that its residents live safely and comfortably and that their property investment is protected to a reasonable degree.

The choice of a home is as much an emotional as a financial investment. When people feel themselves to be a part of their neighborhoods, and responsible to their neighbors, cooperative relationships can flourish. Neighbors can help watch children at play and help protect property against burglary and other crime. Property owners may also be encouraged to continue to maintain their homes to a high standard.

Policy 2-28: Scale of Residential Development

Ensure that the scale and density of new residential development and remodeling is reasonably compatible with the City's predominant single-family residential pattern, except in areas designated for higher density housing.

Strategies

1. **Zoning Ordinance and New Houses.** Amend the zoning ordinance to control the size of new residential construction.
2. **Residential Development Compatibility With Neighborhood.** ~~Require residential development located in non-residential zoning districts to build smaller buildings with fewer units next to standing single-family neighborhoods so that it is reasonably compatible with the neighborhood.~~ Development intensity may be reduced below the minimum in the land use diagram to meet this objective if the standards cannot be met.
3. **Reduction of Building's Apparent Size.** Keep visual intrusion into established neighborhoods to a minimum and reduce the apparent size of the building by using different land levels.
4. **Neighborhood Compatibility Work Program.** Staff shall work with the Planning Commission to develop additional residential zoning and subdivision controls to protect neighborhood character from incompatible new residential construction. Possible tools include height limitations and an indexed floor area ratio.

Policy 2-29: Compatibility of Lot Sizes

Ensure that zoning requests related to lot size consider the need to preserve neighborhood land use patterns.

Strategy

1. Increase the minimum lot size if the proposed new subdivided lot size is smaller than and not compatible with surrounding neighborhood.

Housing Variety

Cupertino encourages a variety of housing types. People with low or moderate incomes can be excluded from living in Cupertino when there is no suitable housing. These include the elderly, the handicapped, newly formed households, and students.

Current zoning regulations perpetuate the single-family detached house. However, skilled designers can fit more intense residential buildings into scattered empty lots without harming the single-family neighborhood appearance.

Policy 2-30 Housing Variation in the Urban Core

Encourage variations from the regulations of the zoning district for properties in the urban core area in housing type and increased density, making sure that the development is consistent with the visual character of surrounding buildings.

Privacy

A successful residential environment should give people a chance to socialize when they choose to and space to be alone, both inside and outside the home. City attention to privacy consideration during the development approval process can go a long way to set homesites apart from each other. Complete privacy is not possible in a city and people must balance the need for isolation and the need to live within an urbanized area.

Policy 2-31: Privacy in Site Design

Ensure that the site design for a residential project has private indoor and outdoor spaces for each unit and common outdoor recreation space.

Policy 2-32: Neighborhood Protection

Protect residential neighborhoods from noise, traffic, light and visually intrusive effects from more intense developments with adequate buffering setbacks, landscaping, walls, activity limitations, site design and other appropriate measures.

Strategies:

Create zoning or specific plans for each planning area which considered the following measures to reduce incompatibilities between new development and existing residential neighborhoods: daylight planes, minimum setback standards, landscape screening, acoustical analysis, location and orientation of service areas away from residential uses and limitations on hours of operation.

Policy 2-33: Minimizing Privacy Intrusion

Keep the sights and sounds of the neighbors from intruding on residents. Techniques can include greater building setbacks, wing walls, window shutters, and non-transparent glass.

Neighborhood Awareness

Burglary, vandalism, and other crimes occur in all neighborhoods. Investigating and solving crimes is the job of the police; crime prevention is everyone's job. Design of new buildings must include security measures, so that the people living or working there will feel safe and so police won't have to respond to so many calls. Building design and placement should let neighbors watch each other's properties and children's play areas.

Policy 2-34: Designing for Security

Use design techniques in new development and rehabilitation to increase security and personal safety and to increase neighborhood awareness.

ECONOMIC DEVELOPMENT

Balancing land use intensity against the traffic-carrying capacity of the street network is a major emphasis of the City's land use policy. The policy, however, must also consider the economic health of the community and find ways to encourage redevelopment of older retail centers as well as provide for the growth of the City's major employers. The development priorities tables already provide an allocation of square footage to meet the needs of small scale redevelopment and revitalization projects. The major employers, however, have long term growth needs that must be reconciled with other City goals.

Policy 2-35: Shopping Center Rehabilitation

~~To make the rehabilitation of shopping centers built before the "Core Area Plan" was adopted in 1973 easier, the City Council may allow a center being considered for rehabilitation to increase its building area above the basic Floor Area Ratio constraint.~~

~~The increase may add as much as 5,000 sq. ft. of additional gross floor space over the existing floor area. The amount of additional floor space will be proportional to the extent to which a development plan incorporates new landscaping and other site improvements, architectural revisions consistent with the General Plan design standards, space for new activities more consistent with land use policies or other General Plan policies, or other benefits consistent with General Plan policies.~~

The objective of the development allocation policies is to ensure that desired development will not overtax the transportation system. If an existing firm or property owner has the ability to reduce the traffic generation of existing and future employees or can cause an increase in the roadway and/or transit capacity, the firm or property owner may increase development potential beyond that allowed by floor area ratios, TIPS, or reallocated space. The ability to expand beyond limits described above must also be based upon a finding that the expanded project meets broad Community goals.

Policy 2-35: ~~Tiered Mitigation Policies~~ Excess Development

Development in excess of the stated development allocations may be permitted if the development conforms to the transportation and housing goals, promotes a positive civic image and provides sufficient economic benefit to the City. Excess development should provide a land use mix which results in sufficient financial return to the City to provide amenities to offset the negative aspects of increased growth. Possible mechanisms to ensure economic benefit include:

- redevelopment
- increased retail sales
- development fees
- new taxes and fees

Such excess development is capped at a maximum of 2,000,000 square feet above the General Plan level.

The housing and transportation goals for excess development are specified in the Housing and Circulation elements of this General Plan.

The overall objectives of this policy are the protection of the community from excessive automotive traffic and the noise and air pollution that traffic generates; the creation of additional housing to alleviate housing demand; and the promotion of economic development.

Policy 2-36: ~~Development of Substandard Areas~~

~~Allow the Floor Area Ratio to be increased to make development or redevelopment of substandard areas easier. The maximum increase is 40 FAR and 1,000 sq. ft. above the building space normally allowed.~~

Policy 2-37: ~~Monitoring for Over-Saturation~~

Continue to monitor development activity, fiscal effects, and development rates to avoid short-term over-saturation of the market.

Policy 2-38 ~~Grandfathered Development~~

Clarify that land use activities or buildings consistent with the General Plan or Zoning as of July 18, 1983 and development activities approved before that date are still valid even though the activity or building is inconsistent with this General Plan. Cupertino's Procedural Ordinance defines the terms by which various types of applications remain valid.

The City's goal to achieve a balanced community is enhanced by the development and operation of Convention Center conference facilities to be located in a core area business and office center. A ~~Convention Center~~ conference facilities would:

1. Provide a meeting and gathering space for official functions that would otherwise be held outside Cupertino.
2. Provide meeting and support services for corporations which are headquartered in the City.
3. Strengthen the viability of a full service hotel which in turn would provide fiscal benefits to the City.

The City may enter into a relationship with a hotel/~~convention center~~ conference facilities developer to encourage such a center.

URBAN DESIGN

The Community Identity section of this Element outlined the urban design strategy for the City. This section provides more specific guidance on the community's urban design expectations. Past planning has encouraged the development of attractive and interesting environments that are sensitive to adjacent land uses. As the city matures, design expectations will evolve. Current design policies will challenge the community to develop the cohesive designs that create livable outdoor spaces and instill a sense of civic identity.

Policy 2-2: Urban Focal Points

Intensify the focus of urban development in Vallco Park, North De Anza Boulevard, ~~and Town Center, and Stevens Creek Boulevard~~ planning areas, subject to design and transportation network controls.

Strategies

1. **Multiple-Story Buildings and Residential Districts.** Allow construction of multiple-story buildings in Vallco Park, Town Center, Stevens Creek Boulevard and North De Anza Boulevard if it is found that nearby residential districts will not suffer from privacy intrusion or be overwhelmed by the scale of a building or group of buildings.
- ~~2. **Governmental Offices in Town Center.** Encourage other governmental agencies to locate new administrative offices in Town Center or move existing offices there.~~
2. **Maximum Building Heights.** The maximum height for new buildings in various planning areas is specified below:

Planning AreasMax. Bldg. Height
(Top of Parapet)Typical LandmarkTown Center

<u>Area west of Torre Ave. and north of Rodrigues</u>	<u>60'</u>	<u>75'</u>
<u>Area east of Torre Avenue</u>	<u>30'</u>	<u>N/A</u>
<u>Southeast corner of Stevens Creek and De Anza</u>	<u>Remain as is, no obstructed view of towers</u>	
<u>Crossroads Corners (NW,NE,SW Corners)</u>	<u>60'</u>	<u>N/A</u>
<u>Stevens Creek Blvd. (Stelling Rd. to East City limits)</u>	<u>30'-45'</u> <u>depending on distance to residential</u>	<u>N/A</u>

Vallco Park

<u>Area facing freeway, west of Tantau Ave.</u>	<u>120'</u>	<u>N/A</u>
<u>East side of Wolfe Road from north of Highway 280 to Vallco Parkway</u>	<u>60'</u>	<u>N/A</u>
<u>North Stevens Creek Boulevard Frontage</u>	<u>45'</u>	<u>N/A</u>
<u>Remainder of Vallco area (see map)</u>	<u>60'</u>	<u>75'</u>

North De Anza Blvd.

<u>Area west of Bandley Drive and its northerly extension</u>	<u>45'</u>	<u>N/A</u>
<u>East property frontage of North De Anza Blvd. between Mariani Avenue and Highway 280</u>	<u>60'</u>	<u>75'</u>
<u>Remainder of North De Anza Blvd.</u>	<u>60'</u>	<u>N/A</u>

Portions of Planning Areas abutting residential areas are subject to a 45 foot maximum height limit in addition to other measures to mitigate visual intrusion. The 45 foot height area as well as other areas are graphically described in the building heights map. In the Town Center, the maximum existing building height is defined by the City Center twin office towers. In the Vallco Park area the maximum committed building height is defined by the Vallco Fashion Mall expansion (file no. 9-U-90) which is subject to a development agreement. The Tandem Jackpot project (file no. 13-U-88) approved at the northwest corner of Stevens Creek Blvd. and Tantau Ave. is specifically exempted from the above new height limitations and would define the maximum existing building height in the Vallco Park area if built.

To qualify for landmark building height consideration, proposed projects should conform to at least four of the following criteria:

- a) Location on a major street frontage.
- b) Very high quality architecture, building materials and finishes.
- c) Inclusion of cultural facilities, such as, art galleries, museums, and performing arts centers.
- d) Inclusion of ground level, outdoor public gathering places that includes pedestrian amenities and public art.
- e) Inclusion of uses that promote social gathering and interaction, such as, restaurants or entertainment activities.

Rooftop mechanical appurtenances and utility structures may exceed stipulated height limitations if they are enclosed, centrally located on the roof, and not visible from the adjacent streets.

The zoning code shall be reviewed and revised as necessary to implement these General Plan height policies. The average curb height should be used as a ground reference to measure building height.

3. Vallco Park Focal Point. To better integrate the Vallco Park Fashion Mall with the surrounding community and emphasize its role as a community focal point, encourage any new retail development at Vallco Park south of Highway 280 to provide outdoor shopping experiences in continuity with the present indoor shopping. New office development should also provide outdoor and pedestrian-oriented designs. To achieve this focus, development review should consider the following design considerations:

~~More specific policies for Town Center are described in the Planning Area Policy Section of this Element.~~

~~Vallco Park is the second high-activity urban area. Vallco Fashion Park, the multiple-story financial center, and the high-rise corporate office building will create a high-intensity activity center with a regional focus rather than a local focus.~~

~~Controls on intensity and height will shape Town Center and Vallco Park in Cupertino's suburban setting. The controls will ensure that the suburban feeling is maintained so that it preserves the integrity of residential districts and contrasts with the high-activity centers.~~

- a. Active retail uses should oriented to the street or outdoor pedestrian corridor with appropriate connections to the interior mall shopping activity.
- b. Parking should be designed and sited to avoid creating pedestrian barriers and shopping islands.
- c. Buildings should be sited to develop a strong street presence.
- d. Projects should include pedestrian amenities: landscaping, furniture, fountains, canopies, special paving materials and other features to enhance pedestrian activity.

Building Form and Scale

Cupertino encourages variation in form, scale, and intensity of building activity. Areas of high-intensity development offer the greatest opportunity for innovations in construction and the City encourages creative approaches to large-scale site planning.

The size, color, materials, and design of buildings and the placement on their sites result in a cumulative design statement that shapes the image of the City. Figure 2-A describes the two high-intensity nodes at Town Center and Vallco Park. The linkages between Town Center and Vallco and other activity centers in the City must be weighed along with a consideration of the design relationship between various use types. The City does not impose a specific architectural style; it seeks a variety of building forms and materials. Cupertino stresses the need to establish design harmony between differing uses, for example, between commercial and residential.

Goal C: Encourage a development pattern for the community that will promote a variety of scale and formality in building form and that will facilitate access to all parts of the community by all segments of the population.

Policy 2-15 On-Site Environments

Emphasize attractive on-site environments during the development review process by giving careful attention to building scale and mass, landscaping, placement, screening of equipment and loading areas, and related design considerations.

Strategies

1. **Low-Profile Building Heights.** Ensure that building height reflects Cupertino's low-profile design. Consider buildings taller than two stories in locations that are already urban in character or where otherwise specified. ~~a tall building might emphasize a City gateway.~~
2. **Monotonous and Monolithic Building Appearance.** Through the City's development review process, encourage sensitive design and site planning that avoids monotonous and monolithic buildings. Design and site planning techniques should include articulation and segmentation of the wall and roof planes, pedestrian-scaled building details, visual openings in the wall plane, smaller building footprints, appropriate building and story setbacks and hierarchical landscaping. ~~Work to be sure that building placement avoids monotony and a monolithic appearance in its surroundings.~~ If the project has many buildings, they should be grouped to create a feeling of spatial units.
3. **Parking Placement in New Development.** Encourage developers of commercial, office, or industrial sites to look into underground parking or consider placing the building above ground-level parking. Go over the design of the below-level parking facilities with the City's police agency to minimize crime potential.
4. **In the City's development review process for major projects, require:**
 - computer simulated modeling and photo montage of development proposals
 - architectural review by a City staff or consulting architect. A separate architectural review fee should be charged in addition to standard application fees.
5. **Consider developing thematic architectural design guidelines for different areas in the City.**

Generally, abrupt changes in building scale should be avoided. A more gradual transition between buildings of one and two stories and low-rise to mid-rise buildings should be achieved by using three-story and four-story buildings at the edge of the project site.

Policy 2-16: Public Open Space Development

Encourage development of residential and public open spaces on lands next to major streets to give a balanced variety of land uses, to increase the housing supply, and to break current or potential strip development patterns.

Streetscape

Cupertino's streets heavily influence the City's form and the lifestyles of people who live here. Streets can form neighborhood boundaries and add to the sense of community, but they can also compartmentalize and cut off other areas, causing isolation.

Streets become barriers when they are difficult to cross and close one region off from another. According to studies, speed, even more than the volume of traffic, greatly influences the activities of people who live nearby. Families with young children want to live somewhere else and people who do live near major streets often decide not to have pets because of traffic dangers.

Because of past decisions and the growth of neighboring cities, Cupertino is cross-divided by a grid of major streets with a high-volume carrying capacity to accommodate through commute traffic. The roadway network is probably the most serious threat to the integrity of Cupertino's community character. Traffic danger, odor, noise, and the stacking effect of cars at peak times disrupt activities along the streets. Taken to extremes, the major streets could turn Cupertino into a random collection of individual neighborhoods.

A city designed around automobiles works and looks entirely differently from one built for a variety of transportation. People who live in a city designed for cars don't have much opportunity to use other forms of transportation.

Street improvement design is guided by these standards.

- a. Ensure that ~~the three corridors~~ De Anza Boulevard leading to the center of Cupertino remains park-like through 50-foot landscaped parkways, landscaped medians, and abundant on-site landscaping.
- b. Limit entrances and exits to properties to avoid disrupting landscaped continuity and traffic flow.
- c. Provide on-site coordination of driveways and parking aisles to allow access to secondary streets and traffic signals and to keep disruption of traffic flow to a minimum.
- d. Hide off-street parking from public view as much as possible. Determine the required number of off-street parking spaces for multiple-story projects in the Core Area along with specific development proposals.

People notice that when they are in a different city by looking at streets. Cupertino can distinguish itself from the outlying fringes of Sunnyvale and San Jose by avoiding copying the development form of those cities: the strip development—an unbroken continuity of commercial and office buildings with intense daytime activity where the automobile is king.

Gateways

Gateways are important in creating a memorable impression of a city. There are formal elements—arches, fountains, banners, or landscaping. Gateways may also be dramatic without constructed devices. Gateways are not always found at the city limits. For example, the street overcrossing at Lawrence Expressway and Stevens Creek Boulevard are a definite gateway to the east edge of Cupertino, even though the overcrossing is not in Cupertino.

Policy 2-17: Community Gateways

Review properties next to community entry points when they are developed or redeveloped to reflect the gateway concept.

Large numbers of curb cuts can impede traffic flow on busy streets as drivers enter travel lanes indiscriminately. Landscaping themes along the street frontage maintain a stronger visual continuity with fewer curb cuts.

Policy 2-18: Curb Cuts

Minimize the number of driveway openings, or curb cuts, in each development.

Strategies

1. **Shared Driveway Access.** Encourage property owners to use shared driveway access and interconnected roads on specific properties where feasible. Require driveway access closures, consolidations, or both when a non-residential site is remodeled.
2. **Direct Access From Secondary Streets.** Encourage owners of property with frontages on major and secondary streets to provide direct access to driveways from the secondary street.
3. **Temporary Curb Cuts On Non-Residential Sites.** Permit temporary curb cuts on a non-residential site subject to the City finding that the opening is necessary for public safety. These temporary openings may be closed and access to the driveway made available from other driveways when surrounding properties are developed or redeveloped.

Policy 2-19: Street Improvement Planning

Plan street improvements such as curb cuts, sidewalks, bus stop turnouts, bus shelters, light poles, benches, and trash containers as an integral part of a project to ensure safe movement of people and vehicles with the least possible disruption to the streetscape.

Strategies

1. **Sidewalk Access to Parking or Buildings.** Examine sidewalk access to parking areas or building frontages at the time individual sites develop to regulate entry to the site at a central point. Sidewalks should generally be no wider than five feet, except in the Heart of the City where increased pedestrian activity necessitates wider walkways.
2. **Bus Stop Turnouts in Street Frontages.** Require bus stop turnouts, or partial turnouts, within the street frontage of a new or redeveloping site. This could contain benches and trash containers for the comfort of people waiting for a bus. Follow Santa Clara County Transit District specifications for improving bus stops.

Policy 2-20: Parking Area Layout

Include clearly defined spaces for pedestrians in parking lots so that foot traffic is separated from the hazards of car traffic and people are directed from their cars to building entries.

Urban Scenic Corridors

Hoping to lessen the visual disruption of Cupertino's image caused by the City's two major boulevards, the City Council requires an extensive landscape setback next to De Anza Boulevard from Stevens Creek Boulevard to Route 280 and on Stevens Creek Boulevard east to the City limits. This will lead the observer to or from the pedestrian-scale shopping environment of Town Center through an intensively planted parkway that people who are driving cars can enjoy.

Policy 2-21: Boulevard Landscaping Setback

Require properties fronting on North De Anza Boulevard and ~~Stevens Creek Boulevard east of Town Center~~ to provide a landscaped front setback of 50 feet from the face of the curb, excluding parking lots.

Strategies

1. **Reduction of Landscaping Width.** Consider reducing the 50-foot width according to the size of the project frontage and the scale and the type of the proposed development.
2. **Views of Plantings From Passing Cars.** Select and arrange plantings so that they can be viewed by people driving cars.

Policy 2-23: Roadway Design to Offset Barriers

Encourage the use of design techniques and development controls that will offset the divisive barrier effects of major roadways.

Strategies

1. **Small Buildings Near Residences.** Build smaller buildings on land next to streets that lead to residential neighborhoods.
2. **Crosswalk Marking and "Chokers."** Mark crosswalks with pavement treatment scaled to the speed of the street and use "chokers" to narrow the street crossing.
3. **Parkway Setback and Town Center.** Do not allow the parkway setback to extend into the Crossroads intersection commercial district or into the future commercial development in Town Center.

Sign Control

In order to keep its streets attractive, Cupertino rejects the modern merchandising technique of directing business signs at drivers frequently and from as far away as possible. The City is also de-emphasizing commercial strip development. So, business signs visible from the streets are limited to those necessary to identify a business site, rather than to advertise from afar. This sign control also enhances the linkage of the Vallco-North De Anza Boulevard-Town Center areas along the City's major streets by keeping sign disruption to a minimum.

Rural Scenic Highways

Most of the significant rural roads are outside City jurisdiction and are covered by the County Scenic Highway Preservation Policy. Montebello and Stevens Canyon Roads in the western foothills and the upper segment of Regnart Road at the south edge of the City are among these streets. The scenic integrity of these rural roads can be protected by significant frontage setbacks, reduced right-of-way, and reduced carrying capacity while still permitting adequate public access to their unique beauties.

Neighborhood Entries

Well-defined entrances are essential to neighborhoods. They aid public safety because drivers are likely to slow down and pay closer attention when they know they are entering a residential area. A gateway that is appropriately styled and in keeping with neighborhood scale can help residents feel part of the neighborhood.

Policy 2-24: Neighborhood Gateways

Define neighborhood entries through architecture, landscaping, or land forms appropriate to the formal or rural character of the neighborhood. Discourage electronic security gates, walls, and fences because these isolate individual developments.

Strategy

1. **Standing Housing and New Development.** Identify standing housing groups while the area is being redeveloped so that they can be enhanced by modifying the street pattern, the street landscaping, or by other techniques.

Traffic Intrusion

Cars intrude into local neighborhood streets at peak traffic hours from Cupertino's many major boulevards and streets. There are several ways to minimize this intrusion, including building streets so that they connect circuitously, rather than directly, to major streets; using street "diverters" that direct or eliminate turns; and variation in pavement width to discourage speeding and emphasize crosswalks.

Policy 2-25: Neighborhood Traffic Pattern Investigation

Investigate neighborhood traffic patterns comprehensively and find solutions to protect neighborhood streets from through-traffic spill-over.

ENVIRONMENTAL MANAGEMENT

GOAL D: Protect the environment and the personal safety of the City's residents.

It is necessary to respect irreplaceable natural assets to maintain community character. Sometimes, careful design controls can cause built forms to complement and enhance the natural terrain. For example, the landmark Mary Knoll Seminary is situated on a prominent ridgeline and accents the wooded setting. In other cases, such as in the Stevens Creek Flood Plain, the land's natural plants should be left undisturbed as a break in the urban pattern.

Preserving the Hillsides

Cupertino's hillsides are an irreplaceable resource shared by the entire Santa Clara Valley. Building a low-intensity residential development in the foothills would give the owners of these houses an interest in preserving the natural environment. This kind of development would be limited to high-income households; this is in compliance with the broad goal of providing housing opportunities to all economic segments of the community. Cupertino is trading off housing opportunity for low-income and moderate-income households for the preservation of a natural resource that benefits the region.

Policy 2-39: Foothill Development

Apply a slope-density formula to low-intensity residential development in the foothills hillsides. Density shall be calculated based on the foothill modified, foothill 1/2 acre modified, and the 5-20 acre slope density formulae. Actual lot sizes and development areas will be determined through zoning ordinances, clustering and identification of significant natural features. Permit limited commercial and professional offices in a Hillside Planned Development if they directly serve the residents.

Policy 2-40: Speical Hillside Protection Area

The 5-20 slope density designation shall provide special hillside protection to form a continuous open space/low density buffer west of the existing urban/suburban development pattern. The area shall include the Kaiser property, the Diocese property, Regnart Canyon area, and Inspiration Heights area and other similar properties.

Policy 2-41: Hillside Parcel Consolidation

In the 5-20 slope density area, require that adjacent properties with lots less than 5 acres in size be consolidated if held in common ownership at the time of General Plan amendment approval and if only one of the lots is developed. Consolidation can be achieved by permitting development on only one of the commonly-held parcels.

Strategy:

1. Require that adjacent properties with lots less than 5 acres in size be consolidated with adjacent lots if held in common ownership at the time of General Plan amendment approval and if only one of the lots is developed. Consolidation can be achieved by permitting development on only one of the commonly-held parcels.

Policy 2-42: Rezoning in Inspiration Heights

Rezone the hatched area shown in Figure -- from R-10 to RHS.

Policy 2- : Existing legal lots in foothill modified and 1/2 acre foothill modified slope density designations.

Existing, vacant legal lots are not considered buildable in the foothill modified and 1/2 acre foothill modified slope density designations if they are substandard in lot size. They are also considered unbuildable if development is proposed on slopes greater than 30%, or on any other areas where studies have determined the presence of health and safety problems; this also applies to any lot in an R-1 zoning district. An exception process will be created for an applicant to seek discretionary approval for an unbuildable parcel.

Seminary Property

Over 200 acres of vacant land exist on the Seminary property in the western area of Cupertino. It is partially bordered by County park and Midpeninsula Open Space Districts lands, and contains such natural features as a riparian corridor, steep, wooded slopes and visually sensitive open lands. Most of the land is subject to Williamson Act contract. While park purchase of the property is top priority, should future development be proposed, the following policy shall apply.

Policy 2- : Seminary Property Protection

Apply all hillside protection policies to the Seminary Property, and specifically protect the prominent knoll on the northeast side of the property and the steep, wooded southwest corner of the property.

Policy 2-43: Urban Service Area Boundaries

The current urban service area shall not be expanded. The intent of this policy is to limit future development to lands within the existing urban service area.

Policy 2-44: Clustering Development in Major Subdivisions

Major subdivisions (5 or more lots) involving lots over 5 acres shall be clustered, reserving 90% of the land in private open space to protect the hillsides from adverse environmental impacts.

Strategy:

Change the RHS ordinance to include this requirement. Require that significant natural features, such as vegetation, slopes over 30%, creeks and water courses, faults, landslides be shown so that the area for clustered development can be determined. Require an open space easement or an open space zoning district on the 90% undeveloped area.

Policy 2-45: Private Open Space Zoning

Establish a private open space zoning district which would allow an owner to designate portions of his property for open space with provisions for trail easements, maintenance standards and other items consistent with preserving the property in its natural state while retaining it in private ownership.

Policy 2-46: Clustering Development in Minor Subdivisions

Encourage clustering for minor subdivisions (4 or fewer lots) over 5 acres. Encourage reserving and dedicating 80% of the land in private open space to protect the hillsides from adverse environmental impacts.

Strategy:

Change the RHS ordinance to include these guidelines.

Policy 2-47: Hillside Building Standards

Establish stricter building and development standards for the hillside area which, among other things, would provide that views of the ridgelines remain unobstructed and would require that designs and materials for homes and other structures blend with the natural hillside environment.

Policy 2-48: Ridgeline Visibility

No structures shall be located on ridgelines if visible from new and established valley floor vantage points unless it is determined that significantly greater environmental impacts occur if structures are located elsewhere.

Strategy:

Amend the RHS ordinance to state that structures shall not disrupt the natural silhouette of ridgelines as viewed from new and established vantage points on the valley floor. Consider the addition of new vantage points such as Foothill Boulevard, McClellan Road, Rainbow Drive, Bubb Road and Regnart Road.

Policy 2-49: Location of Structures

Locate proposed structures to minimize the impacts on adjacent properties and public open space.

Policy 2-50: Avoidance of Geologic Hazards

Identify geological hazards on sites proposed for development and avoid or limit development in those areas.

Strategy:

Amend the RHS ordinance to reflect these policies.

Policy 2-51: Hillside Building Materials

Colors and materials of roofs and walls shall blend with the natural environment.

Policy 2-52: Reducing Visible Mass

Effective visible mass shall be reduced through such means as stepping structures down the hillside, following the natural contours, and limiting the height and mass of the wall plan facing the valley floor.

Strategy:

Incorporate color, materials and height requirements into the RHS ordinance.

Policy 2-53: Building Heights

Provide development standards which limit the height and visual impact of structures.

Strategy:

Amend the RHS ordinance to further limit the height requirements, including overall height and the perceived height of multiple levels from the downhill elevation perspective.

Policy 2-54: Steep Slopes

No structures or improvements shall occur on slopes greater than 30% unless a exception is granted.

Strategy:

Amend the zoning ordinance to include this requirement.

There will be some scarring from hillside development as roads, housing sites, and public and private subdivision improvements are graded. So, improvement standards must balance the need to furnish adequate utility and emergency services against the need to protect the hillside land form, vegetation, and animals. Roads should be narrowed to avoid harming trees and streambeds. Grading should be kept to a minimum by prohibiting mass grading for building sites and by allowing narrow driveways, instead of public streets, to serve more than one lot.

Policy 2-55: Rural Improvement Standards in the Foothills

Require rural improvement standards in the residential hillside zoning ordinance and the hillside subdivision regulations to preserve the rural character of the hillside.

Strategies

1. **Mass Grading in New Construction.** Follow natural land contour and ~~use alternative methods to~~ avoid mass grading in new construction, especially in flood hazard or hillside areas. Grading large flat yard areas shall be avoided.
2. **Retaining Significant Trees.** Retain significant specimen trees, especially when they grow in groves or clusters, and integrate them into the developed site.

The Montebello foothills at the south and west boundaries of the valley floor are a scenic backdrop to the City, adding to its sense of scale and variety of color. It's impossible to guarantee an unobstructed view of the hills from any vantage point, but people should be able to see the foothills from public gathering places.

Policy 2-56: Views for Public Facilities

Design and lay out public facilities, particularly public open spaces, so they include views of the foothills or other nearby natural features.

Strategies

1. **Development Near Public Open Space.** Remove private driveways and building sites as far as possible from properties located next to public open space preserves and parks to enhance the natural open spaced character and protect plants and animals.
2. ~~**Location of Hillside Structures.** Locate houses and other structures in the hillsides so that they do not substantially interrupt the natural silhouette of prominent ridges as viewed from the valley floor.~~

When highly sensitive natural areas such as those subject to floods, brush fires, earthquakes, and landslides become part of a city, human life must be protected.

Policy 2-57: Hillside Development Proposal Analysis

Subject proposals for hillside development to prior investigation by professional consultants to find environmental dangers and to suggest solutions to lessen their effects.

Policy 2-58: Land Disturbance During Development

Be sure that natural land forms and significant plants and trees are disturbed as little as possible during development. All cut and fill shall be rounded to natural contours and planted with natural landscaping.

Strategy:

Amend the RHS ordinance to include the two new requirements. Specify a maximum quantity of allowed cut and fill to help define an acceptable grading quantity.

Most of the hillsides in Cupertino's planning area are unincorporated and undeveloped, so County policies dictate their final land use. County policies provide for low density residential, agricultural, park, open space and wildlife uses, as well as mineral resource extraction. Clustering and dedication of open space are required for residential development. Most policies are compatible with Cupertino's except for those relating to expansion of mineral resource areas, which conflict with the City's hillside protection and compatible land use policies.

~~Some of the hillside lands are in Cupertino's sphere of influence and will be annexed as urban services are required. Those lands outside the urban service area will not annex unless urban services can be provided and boundary changes are approved by the Local Agency Formation Commission (LAFCO).~~

County development, particularly if located near Cupertino's urban fringe area, should consider Cupertino's General Plan. Visual impacts, road access, traffic impacts, and other service demands should be assessed in consultation with Cupertino's plans and personnel.

Policy 2-59: Santa Clara County General Plan

~~Santa Clara County's General Plan is adopted by reference for hillside lands west of the Urban Service Area.~~

Hillside policies found in the Santa Clara County General Plan in effect in 1992 are included in the Cupertino General Plan by reference and are applicable to the unincorporated hillside area. These policies are incorporated because they are consistent with hillside protection goals. If changes are proposed in the County plan which are inconsistent with the City's hillside protection goals, then the City should protest those changes as well as not incorporate them into the City's General Plan.

Policy 2-60: County Development

County development, particularly if located near Cupertino's urban fringe area, should consider Cupertino's General Plan.

Joint Hillside Planning

Cupertino is interested in maintaining the County's current resource protection policies. Since the County Board of Supervisors can change these policies without Cupertino's or neighboring cities' approval, means are sought to provide greater control. One approach is to create a joint powers agreement among the County and the neighboring cities, through which common agreement could be reached on long-term hillside policies. Cupertino will need to take a leadership role in convening affected jurisdictions.

Policy 2- : Joint Powers Agreement

Explore a joint powers agreement made up of Cupertino, Los Altos Hills, Palo Alto, Saratoga and Santa Clara County for the purpose of hillside protection in the unincorporated area.

Flood Plain

Stevens Creek and its streamside are among the natural elements that have the most influence on Cupertino's character. The creek strongly defines the boundary between the urban and rural parts of the City, extends a note of unspoiled beauty into the heart of the developed valley floor, and gives many residents and visitors a space for play, relaxation, or study of the creek's plant and animal life. At times, however, floods can pose a risk to the City.

Land uses in the flood plain should allow the public to get to the creek but should prohibit materials that would restrict the free flow of creek waters or significantly disturb the streamside environment.

Policy 2-61: Existing Uses in the Flood Plain

Allow commercial and recreational uses now exclusively within the flood plain to remain in their present use or to be used for agriculture.

Policy 2-62: Non-Recreational Property to Residential

Designate non-recreational properties to become residential with up to five units allowed with these conditions:

- a. Forbid structures designed for forced human habitation, such as dwelling units, in the natural flood plain. The natural flood plain is defined by the General Plan based on data from the Santa Clara Valley Water District. Unfenced volleyball courts, picnic tables, and similar recreational uses may be constructed within the natural flood plain.
- b. Base the maximum number of dwelling units allowed on each property or group of properties on the numerical designation range on the General Plan Map. Land in the flood plain can be credited in an amount not to exceed one dwelling unit per gross acre to determine the number of dwelling units on each property or group of properties consolidated into one development plan. If part of the parcel is outside the flood plain, the maximum density will be six dwelling units for each gross acre. This policy makes it impossible for a relatively small parcel to get a high density status as a result of one dwelling unit per acre density credit from a relatively large area within the flood plain. The total number of units allowed will be based on the ability of the applicant and designer to integrate the development into the natural environment of Stevens Creek and the adjacent residential neighborhoods.
- c. Require residential development plans to incorporate the Stevens Creek trail described in the public parks section of the General Plan.

Policy 2-63: Land In Natural Flood Plain

Allow public and quasi-public land in the natural flood plain after review of a specific zoning or use permit application.

Energy Awareness

Site and building design can save energy by using the benefits of the seasonal climate and controlling its disadvantages. This section discusses a few of the many different ways to make homes more comfortable and reduce energy needed for heat and cooling.

Sun Control

California requires cities to consider solar access when reviewing subdivision design. To increase the daily number of hours of sunlight, builders are encouraged to orient private outdoor spaces to the south, east, or west sides of a site, preferably with two unobstructed views. Private outdoor spaces also need to be sheltered from the sun. Trellises, awnings, landscaping, and the height and position of neighboring buildings should be studied to protect against excessive shadow on yards, assuring equitable access to sunlight's benefits.

Policy 2-64: Sun Access and Protection

Ensure that all homes have an acceptable balance of access to the sun and protection from it, as well as control of prevailing winds.

Wind Control

Cupertino's prevailing winds blow from the northwest across San Francisco Bay. Winds reach their peak in the afternoon; the City's low buildings and relatively flat ground do not slow them down. The breezes give relief from warm temperatures, but high winds discourage the use of outdoor areas. So, careful site design can break up wind patterns and reduce their speed to produce gentler, more refreshing breezes.

PUBLIC SERVICES AND FACILITIES

An important part of Cupertino's quality of life is the quality of the public services and facilities enjoyed by residents and workers in Cupertino. This section discusses schools and the library. Other services and facilities: police, fire protection, utilities and waste disposal are discussed in the Public Health and Safety Element of this Plan.

School Districts

Cupertino is served by excellent public education institutions. Cupertino Union School District, Fremont Union High School District and Foothill-De Anza Community College District provide nationally acclaimed elementary, secondary and post-secondary education respectively. This group of school districts is one of the primary attractions of Cupertino for home buyers particularly families with school-age children.

While the City is not directly involved in the provision of education, it does control growth and development which can affect schools by increasing student enrollment beyond the means of schools to service them. It is thus crucial for the City to continue working with its school districts to maintain the high quality of the education services.

Policy 2-70: Planning for Schools

Recognize the financial impacts of increased development on the school districts' ability to provide staff and facilities. Work with the districts to assure that the continued high level of school services can be provided for new development.

Policy 2- : Busing Access to the Hillsides

If busing continues, encourage District staff to become more involved in hillside roadway design to meet the minimum standards required for busing access.

Policy 2- : Pedestrian Access

Create pedestrian access between new subdivisions and school sites.

Policy 2-71: Permit Data for Schools

Continue to provide School Districts with building permit data which will enable the District to record the type of construction, location and their square footage to plan for future schooling needs.

Policy 2-78: De Anza College

Allow land uses not traditionally considered part of a college such as lodging or conference facilities and institutional office and research facilities to be built at De Anza College. Final determination of the intensity, character, and ultimate desirability will be evaluated with regard to the effects on traffic and the consistency with the college's educational nature.

LIBRARY SERVICES

The Cupertino Library is another important public resource, 29,000 Cupertino residents hold library cards. The library is operated by Santa Clara County Library Services, but funded through library-dedicated property taxes and City general fund revenues.

In 1988, the building was remodeled to add an additional 11,546 sq. ft., for a total building area of 39,072 sq. ft. The library is experiencing a significant increase in circulation (119%) since the reopening of the building.

If the use of the library continues to rise, library staff will have to make choices to accommodate demand. Library staff has two options: either purchase more shelving and delete seating or remove items from the collection either by discarding them or storing them in the basement. If the City of Cupertino requires a higher level of service, (building, staff and materials) the funding for this would have to be provided in whole from the City of Cupertino because no additional financing is available from the County of Santa Clara.

Policy 2- : Library Service Level

Recognize that if the community desires a higher level of library service, that this would require the cooperation between the County of Santa Clara and City of Cupertino in expanding library services and facilities if deemed necessary.

Policy 2- : Library Planning

Integrate and coordinate the Library system into all applicable General Plan goals, such as transportation, pedestrian and bike trails.

Policy 2- : Improving Library Service

Encourage the library to incorporate new technology to improve service levels into the library system.

Encourage the adjustment of library collections and programs to meet the needs of Cupertino residents, businesses and ethnic population.

Policy 2- : Library Expansion

Actively seek methods to increase library facilities.

Heritage Aesthetic, Cultural and Historic Resources

Cupertino is a relatively modern city, having only incorporated since 1955. The recentness of city status tends to obscure earlier events that were important in the development of this community.

Before European settlement, Native Americans resided in the area, settling along streams and creeks and in nearby clusters of oaks. The area was first explored by Spanish soldiers and later settled by numerous European immigrants who recognized the fertile land and converted it to a thriving agricultured economy.

Today, Cupertino is part of a world-renown high technology center, known as Silicon Valley, and home to several companies producing leading edge computers and software.

Heritage Historical properties show Cupertino's history past. These sites remind residents of the colorful people who built and occupied them, creating stronger ties between today's Cupertino residents and yesterday's.

Most of the historically significant properties are in private ownership, so pressure to remove them or change sites in a way that obscures historic character is not controlled by public policy. Where feasible, private owners and City government can work together to find creative alternatives to the destruction of heritage historical properties.

A successful example of this cooperation is the rehabilitation of the De La Vega stable in the Rancho Deep Cliff residential subdivision. The "Tack House" was refurbished extensively inside but its exterior remains much the same. It is the 61-home community's recreation center and meeting hall.

GOAL E: Preserve historically and archaeologically significant structures, sites and artifacts to instill a greater sense of historical and cultural awareness and community identify.

Policy 2-65: Landmark Rehabilitation

Undertake an active partnership with private owners of landmark structures to rehabilitate the buildings for public or semi-private occupancy and retain their historic character.

Strategies

1. **Restoration of Historic Properties.** Encourage and aid private efforts to restore historic properties by allowing flexible interpretation of zoning ordinance and code standards not essential to public health and safety when they would make the restoration easier and economical. These could include reduced on-site parking provisions or lesser setback distances.
2. **Historic Property Zoning Category.** Create a historic property zoning category to regulate the unique aspects of historic preservation and to make it easier for private owners to obtain the tax advantages that are offered for preserved property in such zones.

Policy 2-66: Archaeologically Sensitive Areas

For development sites in areas likely to be archaeologically sensitive, such as along stream courses and in oak groves, the City development review process should require a specific investigation to determine if significant archaeological resources may be affected by the project, and should also require appropriate mitigation measures in the project design.

Policy 2-67: Native American Burials

Recognize that Native American burials may be uncovered in unexpected locations and that State law prescribes the appropriate actions to take upon discovery of such burials during construction, including stoppage of work in surrounding area, notification of appropriate authorities, and reburial of remains in an appropriate manner.

Policy 2-68: Heritage Trees

Protect and maintain heritage trees in a healthy state. A heritage tree list shall be established and periodically revised to include trees of importance to the community.

GOAL F:

Create a civic environment where the arts freely express our innovative spirit, celebrate our rich cultural diversity and inspire individual and community participation.

Policy 2-69: Public Arts

Stimulate opportunities for the arts through cooperative relations between local business and the City.

Strategies

1. Consider conditioning development approvals with a requirement to install works of public art for public and private non-residential projects of 100,000 square feet or more.
2. Promote publicly visible artworks in public and private development and gateways to the City.
3. Follow Public Art guidelines to maintain an appropriate cultural milieu.'
4. Encourage the development of artist workspace.

THE LAND USE MAP AND GENERAL POLICIES

The Land Use Map of the General Plan illustrates the policies in this element and in other elements that play a major role in guiding urban development. The map can't be used alone because it illustrates the text and should be used along with it.

The General Plan Map illustrates the general form of Cupertino in terms of space allocation and intensity of land use activities. In contrast, the Municipal Zoning Map divides the City into very precisely drawn land use categories. Zoning districts have precisely written standards governing permitted activities and development forms. A series of policy statements accompany the planning text to guide the public and government officials in establishing precise zoning boundaries to pinpoint permitted activities.

California requires that the zoning map and zoning regulations be consistent with the General Plan Map and text. The zoning map and regulations must be brought into conformity with the General Plan within a reasonable period after it is adopted.

Land Use Categories

Patterns and symbols, defined on the map legend, are used on the General Plan Map to identify land use categories, the road system, major land features, and significant public and private facilities.

Here is a description of each land use category:

Residential

Areas suitable for dwellings, divided into five sub-categories based on dwelling unit density expressed as the number permitted on each gross acre. The General Plan does not define whether the dwellings are to be owned or rented by their inhabitants or whether they are to be attached or detached.

Very Low Density: Intensity is based on applying one of three slope-density formulae—Foothill Modified, Foothill Modified 1/2 Acre, or ~~Semi-Rural 5 Acre~~ Foothill 5-20 acre. This classification is intended to protect environmentally sensitive areas from extensive development and to protect human life from hazards related to flood, fire, and unstable terrain.

Low Density: 1-5 units on each gross acre. This category is intended to promote a suburban lifestyle of detached single-family homes. Planned residential communities can be incorporated into this category if the development form is compatible with adjoining residential development.

Medium Low Density: 5-10 units per gross acre. This category accommodates more intensive forms of residential development while still being compatible with the predominant single-family detached residential neighborhood. This development can be successfully incorporated into a single-family environment.

Medium High Density: 10-20 units per gross acre. This category provides greater opportunity for multiple-family residential developments in a planned environment. This range usually results in traffic volumes and buildings that are not compatible with single-family residential neighborhoods. These developments should be located on the edges of single-family residential communities where utility services and street networks are adequate to serve increased densities.

High Density: 20-35 units per gross acre. This promotes a wide range of housing choices in multiple-family dwellings. The intensity requires that the category be used only at locations with adequate utility services or transit or both. The development may result in structures with three or four levels and underground parking. This category offers maximum opportunity for housing choice, especially for people who want a city environment.

Commercial/Residential

This designation allows primarily commercial uses and secondarily residential uses or a compatible combination of the two. Commercial use means directed to retail sales, businesses, professional offices, and service establishments with direct contact with customers. This applies to commercial activities ranging from neighborhood convenience stores to regionally oriented specialty stores. Retail stores that would be a nuisance for adjoining neighborhoods or hurt the community identity would be regulated by the commercial zoning ordinance and use permit procedure.

Residential densities are not specified because of the flexibility needed to develop residential uses in primarily non-residential areas. Smaller commercial parcels in existing residential areas may be redeveloped at densities compatible with the surroundings. Residential development is subject to the numerical caps and other policies described in the development priorities tables.

Office

This designation includes all office uses referenced in the City's Administrative and Professional Office Zone including administrative, professional, and research and development activities.

Prototype research and development is permitted if it is conducted along with the office functions of a business. Prototype R&D is defined as research and development activities that lead to the development of a new product or a new manufacturing and assembly process. Products developed, manufactured, or assembled here are not intended to be mass produced for sale at this location.

Guidelines for Prototype Research and Development:

The type, use, and storage of hazardous material for prototype R&D or assembly is regulated by the Uniform Building Code, the Uniform Fire Code, and any new ordinance or other regulation that controls hazardous materials.

The building must not present the appearance that a prototype R&D or assembly process is in place. There will be no exterior storage and receiving facilities will be small. Generally, no more than 25 percent of the total space occupied by the firm will be devoted to this activity.

Commercial/Office/Residential

This designation applies to the mixed use areas which are predominantly commercial uses and secondarily office uses. Supporting residential uses may be allowed when they are compatible with the primarily non-residential character of the area. Residential densities are not specified because of the flexibility needed to develop residential uses in primarily non-residential areas. Residential development is subject to the numerical caps and other policies described in the development priorities tables.

Industrial/Residential

This designation is applied allows primarily industrial uses and secondarily residential uses or a compatible combination of the two. Industrial use refers to manufacturing, assembly, and research and development. Administrative offices that support manufacturing and wholesaling are included.

Residential densities are not specified in the non-hillside areas because of the flexibility needed to redevelop existing industrial areas for residential living. Residential development is subject to the numerical caps and other policies described in the development priorities table.

Office/Industrial/Commercial/Residential

This designation applies to areas that are primarily office uses and industrial uses. Commercial uses should be ancillary and supportive of the office and industrial base with the exception of larger parcels which may be used for regionally oriented stores. Residential densities are not specified because of the flexibility needed to develop residential uses in primarily a non-residential area. Residential development is subject to the numerical caps and other policies described in the development priorities table.

Commercial/Residential

~~This designation is applied to lands located on major boulevards and suitable for commercial or residential activities or a combination.~~

Commercial/Industrial

~~This designation is applied to lands suitable for either commercial or industrial activities or a combination.~~

Quasi-Public/Institutional

This designation is applied to privately owned land involving activities such as a private utility, a profit or non-profit facility giving continuous patient care, an educational facility, or a religious facility.

Private Open Space

This designation is applied to privately-owned lands used for low-intensity, open space activity such as hiking, walking or picnicking. Other, more intense, uses deemed compatible with this designation may be approved through the use permit procedure.

Private Recreation

This designation is applied to privately owned land use for recreation oriented to the outdoors.

Parks

This designation is applied to land owned by the public and used for recreation.

Public Facilities

This designation is applied to land used or planned to be used by a governmental entity for a public purpose.

General Policies

The loose format of the General Plan Map makes it necessary to enact general land use policies to guide City officials and others in formulating private and public land use decisions.

Policy 2-72: Boundaries Between Land Uses

Base boundaries between land use classifications generally upon lot lines of established land use activities, public streets, and constructed or natural physical barriers or a combination of any of these. Show the precise boundary on the zoning map.

Policy 2-73: Residential Density Ranges on the Map

Recognize that residential density ranges on the General Plan Map and its legend show the desired development intensity for a general area. Also recognize that the actual gross dwelling unit density may be slightly different if the properties reflect the general development character of neighboring properties.

Policy 2-74 Minimum Lot Size for Single-Family House

~~Allow owners of existing legally created residential lots of at least 5,000 sq. ft. to use them for residential purposes. The minimum lot size for a conventional single-family residential zoned parcel is 6,000 sq. ft. The owner of a legally created parcel less than 5,000 sq. ft. may also develop it for single-family residential use if it can be shown that the property was not under the same ownership as any contiguous property on the same street frontage on or after the effective date of this amendment.~~

~~Owners of contiguous substandard residential lots of record which do not conform with the density requirements of the Plan may redraw the lots when it results in a more logical development pattern and is generally consistent with the character of the surrounding neighborhood. Consolidation or redrawing should not result in more lots or more potential dwelling units than the number of legal lots of record.~~

Policy 2-75: Public and Quasi-Public Activities and Land

Allow public and quasi-public activities to be located within any land use designation in the General Plan upon zoning review approval to ensure compatibility with the surrounding neighborhood and the street and utility system capacity. Allow residential land uses in areas designated for quasi-public uses with appropriate zoning changes.

Policy 2-76: Closed School Site Use

Designate all public school sites for public use provided that school that are closed may be used for quasi-public or institutional activities or both, or for housing. The dwelling unit intensity and development pattern shall reflect the character of the surrounding residential districts. The future of unused school sites shall also reflect the park acquisition program in the Environmental Resources Element.

Policy 2-77: Very Low Density Residential

Allow lots of record legally created by the County or City subdivision process before June 22, 1976, and located on land designated for very low density residential use to be used as a single-family building site even though the application of current slope-density formulas would prohibit development. Do not allow substantially vacant, non-improved small lot subdivisions that were recorded many years ago without adequate field investigations and improvement plans to be used as a single-family building site. In such subdivisions, lots can be used for single-family housing even though the application of slope-density formulas would forbid development under any of two circumstances:

1. Where the owner of the lot either owns or buys contiguous land that can be combined with the lot, by filing a new map, to create a new lot or lots to conform to the slope-density formulas.
2. Where a lot was under ownership by June 22, 1976, and the owner has not owned or bought any contiguous land since the approval of this document which would allow him or her to meet the requirements of the first instance.

Figure 2-E explains this policy for Inspiration Heights.

Policy 2-79: ~~Take-Out Restaurants~~

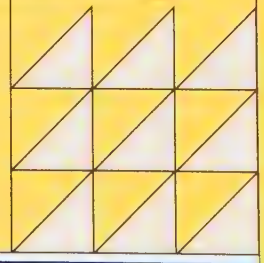
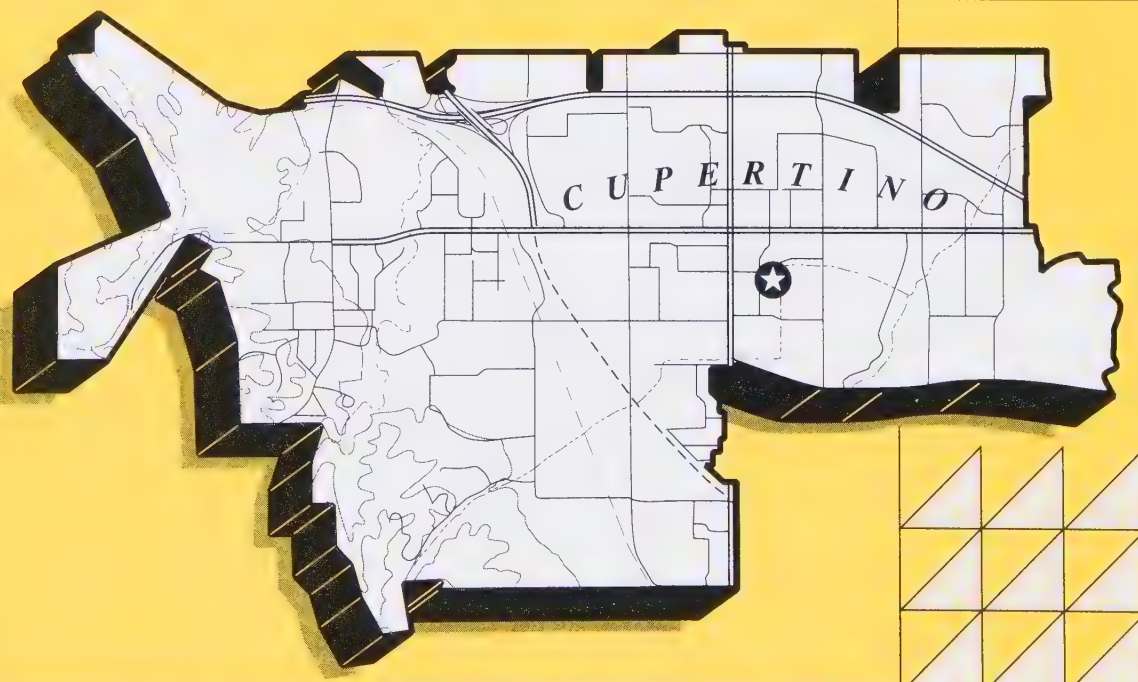
~~Actively discourage more freestanding take-out restaurants unless they are part of an overall planned center.~~

Policy 2-80: New Drive-Up Services

Permit new drive-up service facilities for commercial, industrial, or institutional use only when adequate circulation, parking, noise control, architectural, and landscaping compatible with the visual character of the surrounding uses are provided and residential areas are adequately buffered. Further evaluate any proposed site for conformance with other goals and policies of the Plan.

Policy 2-81 Late-Evening Entertainment Activities

Discourage late-evening entertainment activities such as cocktail lounges, recreational facilities, and theaters in the relatively narrow depth of Stevens Creek Boulevard properties but encourage them in Town Center, Valco Park, and other large properties that are isolated from residential districts and can provide their own security.



Housing



INSTITUTE OF ENVIRONMENTAL
STUDIES LIBRARY

FEB 11 1990

UNIVERSITY OF CALIFORNIA

3

POPULATION AND HOUSING PROFILE

Community Profile

Population

Cupertino, like other cities within Santa Clara County, has experienced a rapid increase in population from its incorporation in 1955 with less than 2,500 residents to its 1990 population of 40, 26,358 (State Department of Finance, 1990 census). In contrast to the corporate limits, the City's 1990 Urban Service Area population ~~was projected to be 49,700~~ is 46,911 (ABAG, 1989 1992). The accelerated growth that occurred from the 1950's to present is a result of northern Santa Clara County's economic transition from an agricultural center to the worldwide headquarters for the semi-conductor industry.

Between 1970 and 1980 Cupertino's population almost doubled, partially as a result of a 1979 boundary transfer when 12,000 new residents were added to the community. Outside of annexations, the rate of population growth is expected to increase at a slower rate due to the reduced number of children per household, the scarcity of developable land, and a slower rate of housing construction. There will be an estimated 7.9% increase in population between 1990 and 2,000 (ABAG, 1989 92).

Age Distribution

The age distribution of the population in Cupertino has undergone a change. ~~In 1970 the median age was 26 years old; however, by 1980 it increased to 32 years. In 1985 the median age was about 33; in 1995, the median age is projected to be about 36 (Sedway & Associates, 1990). In 1980 the median age was 32 years; in 1990 it was 36 years.~~

Until recently the percentage of school-age children was decreasing. For example, the enrollment of school-age children dropped 51% in the Cupertino Unified School District from 21,593 in March 1974 to 10,992 in June 1984. This trend began to reverse in 1984. The current (1990) school enrollment is 11,900.

Ethnic Distribution

Historically, Cupertino has a very small minority population. Between 1975 and 1980, the Caucasian population decreased slightly from 89% to 86%. There was a corresponding slight increase in the Asian-American population from 3% in 1975 to 6.9% in 1980. The other ethnic groups remained proportionally similar in size over the same period.

Recently, the Asian-American population in Cupertino has increased. The 1990 census reports that 23% of Cupertino population is Asian; 74.3% is white, and 1% is black. ~~Although figures will not be available until the 1990 Census information is released, the percent of Asian-Americans in Santa Clara County increased from 8% in 1980 to 11% in 1985 (Santa Clara County Advanced Planning Office, 1988). The percentage is projected to increase to 14% in 1990 and 22% in 2010.~~

~~Although the students enrolled in Cupertino schools do not necessarily reflect the percentages of minority groups in the general population, the most recent information is available from the Cupertino Union School District. At left are the percentages of students, by ethnicity, currently enrolled in Cupertino schools.~~

Employment

Cupertino's industrial base is high-tech electronics/ computer corporations, similar to the entire northwest section of Santa Clara County. The City serves as a corporate headquarters and center for research and development. Due to high land and living costs, very little manufacturing takes place in the City. The three largest employers are Hewlett-Packard (4,200 employees); Apple Computer (4,200 employees); and Tandem Computers (3,300 employees). Employment levels at Apple and Tandem increased about 62 percent between 1986 and 1989, and both companies wish to increase employment growth in Cupertino during the 1990's. With the exception of the past few years, Hewlett - Packard has also experienced growth (Sedway & Associates, 1990).

A 1985 survey of Cupertino employees indicated the following: 29.6% were in managerial or professional positions; 7.5% were technicians; 11% were in sales; 18.3% were in clerical positions; 8.5% were in service fields; .5% were in farming; 11.3% were skilled laborers and 13.1% were unskilled laborers.

The labor force includes a significant percentage of women. In 1980, approximately 44% of the women over 16 years of age were employed full time (35+ hours per week) while 25% were employed part time. ~~This is an increase over the 1970 Census and is important~~ This is an important fact in that a larger proportion of working women affects household size, income, and housing preference.

Jobs and Housing

In regard to the actual number of employees, Cupertino, like the other cities in northern Santa Clara County, provides a large employment base. Because Cupertino is an employment center, a large number of employees commute into the City. Cupertino's sphere of influence has approximately ~~42,830~~ 35,650 jobs compared to ~~30,600~~ 27,163 employed residents (ABAG, ~~1989~~ 1992). This disparity is expected to grow about ~~four~~ five percent ~~during the next five years~~ by the year 2000. The ratio of jobs to employed residents is currently ~~1.4~~ 1.3, while the ratio in the County is 1.1. The historical and projected cumulative job growth and additional employed residents in Cupertino is shown below (ABAG, ~~1990~~ 1992).

The cumulative total historical and projected number of new jobs by type in Cupertino is as follows (ABAG, 1989):

	1980	1985	1990	1995	2000	2005
Agricultural & Mining	349	280	260	250	80	70
Mfg & Wholesale	20,592	22,700	22,590	24,810	25,390	26,990
Retail	6,615	6,720	6,820	6,780	6,870	6,940
Service	6,482	7,360	9,250	10,140	12,150	12,570
Other Jobs	3,201	3,510	3,910	5,010	5,300	5,740
Total	37,239	40,570	42,830	46,990	49,790	52,310

	<u>1980</u>	<u>1990</u>	<u>1995</u>	<u>2000</u>	<u>2005</u>	<u>2010</u>
<u>Agricultural & Mining</u>	<u>349</u>	<u>270</u>	<u>250</u>	<u>130</u>	<u>140</u>	<u>140</u>
<u>Mfg. & Wholesale</u>	<u>20,592</u>	<u>16,020</u>	<u>16,020</u>	<u>18,000</u>	<u>18,160</u>	<u>17,890</u>
<u>Retail</u>	<u>6,615</u>	<u>7,430</u>	<u>7,670</u>	<u>7,780</u>	<u>7,850</u>	<u>7,830</u>
<u>Service</u>	<u>6,482</u>	<u>8,450</u>	<u>9,180</u>	<u>11,220</u>	<u>11,720</u>	<u>12,590</u>
<u>Other Jobs</u>	<u>3,201</u>	<u>3,480</u>	<u>4,030</u>	<u>4,800</u>	<u>5,160</u>	<u>5,000</u>
<u>Total Jobs</u>	<u>37,239</u>	<u>35,650</u>	<u>37,150</u>	<u>41,930</u>	<u>43,030</u>	<u>43,450</u>

~~Recent information provided to the City by Cupertino businesses indicates that employee densities are decreasing. The actual current and future job counts may be less than ABAG's projections and should be verified by further study.~~

On the surface Cupertino's jobs/housing equation is out of balance as indicated by the jobs/employed residents ratios. Thus, the relationship between employment and housing plays a major role in the future housing plans for Cupertino as well as the entire county. When a community or region is unable to provide enough housing for its employees, these employees must come from outside the area. Long distance employment commutes contribute to additional traffic congestion, air pollution, and social and economic problems associated with the fiscal imbalance between communities. The present jobs and housing imbalance in Cupertino is also a county and regional problem. Existing development patterns which have established industrial centers must be taken into account in analyzing which localities supply jobs and which supply housing. The fiscal inequalities between communities, particularly those who must spend a great deal of money to service residential areas, must be resolved. Those communities which do provide employment need to make efforts to increase their housing potential to address the housing needs of their employees.

One of the ways to increase housing potential is through the General Plan. For example, the City has the means to control its industrial expansion via the Land Use Element. ~~However, once an industrial base is established, it is difficult to control the expansion of business operations, particularly rapid growing electronic firms.~~ Areas for additional housing are designated to help maintain a balance between jobs and housing. The City of Cupertino's Land Use Element identifies permitted land use types and ~~scale of~~ development intensities which all property owners have a reasonable expectancy to achieve. ~~Developers can add residential units to their projects without penalty in terms of the allowed floor area ratios established in the City's Land Use Element.~~

Household Characteristics

Housing Units and Households

From 1970 to 1980, the number of housing units in Cupertino more than doubled from 5,598 to 12,554. 1990 housing units are estimated to be ~~15,046~~ 16,055 (State Dept. of Finance, January, 1990) (Census 1990) (Other sections of the General Plan are based on 15,046 housing units, which was the operative number in 1990. This difference will be rectified in future editions). The estimated 1990 number of housing units within the urban service area is 17,460.

The number of households in the City limits in 1990 is ~~14,874~~ 15,361 (assumes 1.14% vacancy rate). From 1970 to 1980 average household size decreased from 3.10 to 2.75 persons per household, reflecting the trend of fewer births and more single person households (ABAG, 1989). However, between 1980 and 1990, average household size decreased at a slower rate to ~~2.68~~ 2.60 persons per household in 1990 (Census 1990).

Below is a summary of the historical and current number of housing units and average household size in Cupertino (city limits).

Year	Housing Units	Household Size
1970	5,598	3.10
1980	12,554	2.75
1990	15,046 <u>16,055</u>	2.68 <u>2.60</u>

Type

Currently single family homes remain the predominant housing type. In 1990, ~~60%~~ 58.8% of all housing units were single family (detached); ~~13.2%~~ 13.0 were single family (attached); ~~26.8%~~ 8.1 were multifamily and ~~less than 1%~~ were mobile homes (State Dept. of Finance, January, or other Census, 1990). Projections of future housing demand by type of unit, based on household income and construction costs, indicate that if housing affordable to the entire spectrum of economic groups is to be made available, the supply of multi-family units must increase in amount and percent of the total housing stock.

The City has no restrictions on mobile homes or other types of factory built housing. There are currently several manufactured homes that have been constructed in Cupertino.

Group quarters population is minimal. In 1990, group quarters population is estimated to be ~~680~~ 313, which represents a ~~24% increase above~~ 43% decrease from the 1985 group quarters population. This figure is expected to increase slightly. (Dept. of Finance). This decrease is due to retirement centers no longer being counted as group quarters.

Owner-Renter Distribution

The 1980 Census indicated 62% of the City's occupied units are owner occupied and 38% are renter occupied. Applying these percentages to the total number of households in 1990 results in The 1990 Census reports 9,222 9,671 owner occupied and 5,652 5,682 renter households, which are approximately the same percentages as 1980.

Vacancy Rate

The vacancy rates for single and multifamily housing units decreased dramatically between 1975 and 1985 and have recently stabilized. In 1975, the vacancy rate was 7.01% and by March 1985 it had decreased to 1.7% (Housing Vacancy Survey published by the Federal Home Loan Bank of San Francisco). The overall vacancy rate in the City is currently 1.14% (State Dept. of Finance, January, 1990). A January 1990 survey of apartment managers of all complexes containing over 20 units in Cupertino indicated a 2.09% vacancy rate for apartments (Planning Department, January, 1990).

In order to preserve its rental housing stock, Cupertino adopted a Condominium Conversion Ordinance in 1978 that prohibits conversions unless the vacancy rate exceeds 5%. Since the Ordinance was adopted, there have been no conversions.

Overcrowding Conditions

In 1980, approximately 188 households, or 1.5% of the total households, were overcrowded. In 1970, 3.6% of the total households were overcrowded. Applying the 1980 percentage to the total number of current households, results in an estimated 223 households in overcrowded conditions (approximately 138 owner occupied units and 85 renter households).

Overcrowding is defined as more than 1.01 persons per room. The decreasing household sizes from 1970 to 1980 lessened concerns regarding overcrowding. However, the widening gap between demand and supply of housing could contribute to further overcrowding.

Elderly and Handicapped

As discussed above under "Age Distribution", the median age in the City has been increasing. ~~However, determining the exact number of elderly persons will have to await the 1990 Census information.~~ In 1980, approximately 5.5% of the City's population was elderly (65 years or older) and about 4.5 of non-institutional population from ages 16 to 64 had some type of a work disability (handicap). In 1990, 8.5% are 65 years or older and 6.9% of ~~Applying the 1980 percentages to the 1990 population results in an estimated 2,232 elderly persons and 1,826 persons~~ ages 16 to 64 with have some type of work disability (handicap). Approximately 1,384 elderly persons own their homes and 848 are renters ~~(based upon percentages from the 1980 Census).~~

Persons in these categories frequently have an income below the median and can have difficulty entering the housing market either to rent or to own. In 1980, 8.9% of those persons with incomes below the poverty level in Cupertino were 55 years of age or older. In 1990, the number of rose to 15%. A study of seniors in Santa Clara County in 1989 indicated that the majority of senior couples in the county have incomes below \$2,024 monthly (Council on Aging of Santa Clara County, Inc., 1989). The fact that the elderly are on fixed incomes limits housing choice when prices rise. In addition, conventional home design techniques may not fit the physical needs and limitations of these groups.

Female Heads of Household

According to the 1980 U.S. Census, there were 1,091 female heads of families within the City. ~~This group has increased from 8% in 1966 to 12% in 1980. Applying the 1980 percentage to the total number of households in 1990 results in an estimated 1,785.~~ there were 1,165 female heads of household. A 1985 survey by QED Research indicated that female heads of households who are working in Cupertino and who have children, had the lowest average salaries among Cupertino workers. For example, a female householder with children had an average annual salary of \$29,719 while the overall average yearly household income of Cupertino workers was \$60,000 (primarily due to the fact that there is often more than one wage earner). The trend towards a greater percentage of female heads of households needs to be addressed by the community in terms of housing programs and land use policies.

In addition to affordability needs, there are also accessibility needs. The lower income status of this group indicates that rental housing may be the only affordable housing. However, many apartment owners will not rent to families with children even though a 1982 California Supreme Court decision and the Fair Housing Act Amendments of 1988 made this type of discrimination illegal (Lawrence, 1990).

Large Families

Approximately 1,304 or 10.6% of the 12,284 housing units within Cupertino in 1980 were occupied by households of five or more persons. ~~Applying the 1980 percentage to the total number of housing units results in an estimate 1,595 large families in 1990.~~ In 1990, 1,179 or 7.3% are large families. Approximately 998 766 live in owner occupied units and the remaining 597 413 live in rental units. Given the fact that average household sizes are decreasing, the traditional housing concerns related to large families are becoming less important from a public policy point of view. The typical indicator of problems associated with large families is overcrowding. This does not appear to be a problem for Cupertino in view of the small percentage of overcrowded households (1.5%) reported in 1980.

Farmworkers

State law requires analysis of the special needs of farm workers. Cupertino's lands in agricultural use are negligible. There are very few farm workers in Cupertino who require special housing assistance.

Families and Persons In Need of Emergency Shelter

State legislation (AB 2579) enacted September 30, 1984 requires, among other provisions, local governments to assess in the housing element the need for temporary or emergency shelter in their community (Government Code Section 65583 (a)(6)). Effective January 1, 1988, housing elements are required to identify "adequate sites which will be made available through appropriate zoning and development standards and with public services and facilities needed to facilitate the development of emergency shelters and transitional housing" (Government Code Section 65583 (c)(1)).

There are two basic ways of counting the homeless:

- daily count revealing how many people are homeless on a given day
- annual count revealing how many people were without a home at least one day in a year.

According to a report by the County there were an estimated 855 homeless persons assisted by various agencies in the County on one particular day in 1989 (Santa Clara County Homeless Task Force and Homeless Overview Technical Committee, November, 1989). Using a ratio of total population applied to homeless population, Cupertino's homeless population on a daily basis is estimated to be 24 persons.

Homebase, a regional support center for homeless policy and programs, reported approximately 13,000 homeless persons in Santa Clara County in 1989. Assuming that Santa Clara County's population of homeless persons is evenly distributed, results in an estimated 361 homeless persons in Cupertino on an annual basis (Homebase, June, 1990).

The Emergency Housing Consortium (which has five emergency shelters in Santa Clara County) served 10 Cupertino residents during a one year period (July 1, 1988 through June 30, 1989). There were a total of 140 shelter nights spent at Emergency Housing Consortium shelters by the 10 Cupertino residents.

The estimated number of homeless persons in Cupertino (based upon an assumption that the county-wide population of homeless is evenly distributed) may be high because homeless persons are more concentrated in urban areas such as San Jose where housing is less expensive and there are more low skilled jobs. A more accurate count is not possible because homeless persons tend to move from one area to another (Brennan, 1990).

There are currently no permanent emergency or transitional shelters in Cupertino. However, Cupertino Community Services, a non-profit organization, provides emergency services to persons in need by serving as a referral service to agencies which furnish emergency temporary housing shelter and meals in Santa Clara County. This includes participation by Cupertino churches in an emergency shelter that rotates monthly among local churches. Rotating shelters are permitted uses in Cupertino's quasi-public zoning district. Over the past year In 1990, Cupertino Community Services provided some form of assistance to about 400 to 500 persons a month and referred another 400 persons a month to agencies that supply food and/or shelter (Brennan, 1990). The assistance provided by Cupertino Community Services varies from helping to pay utility bills and purchase food to providing rental assistance and hotel room vouchers. Last year Cupertino Community Services provided rental assistance and hotel room vouchers to approximately 20 persons/month.

The City of Cupertino has been providing financial assistance to Cupertino Community Services through the City's Human Services & CDBG programs Program. During the past three years, the City provides \$8,700 annually: In 1986, the City provided \$7,500 to Cupertino Community Services. \$8,700 is unrestricted, \$10,000 is to screen low-income housing eligibility and \$10,000 is for the rotating homeless shelter.

~~Recently, the City has discussed with interested individuals a program to provide an emergency shelter that would rotate monthly among local churches. Similar programs have been implemented in surrounding communities (i.e., Los Altos and Palo Alto). An ordinance amendment is being prepared which will allow emergency shelters in the BQ zone as a conditional use.~~

Susidized Units At Risk To Convert To Market Rate Housing

Government Code section 65583 (a)(8) enacted in 1989 (SB 1282) requires that the Housing Element include an analysis of existing multifamily rental developments that are eligible to change to non-low-income housing uses during the next 10 years due to termination of subsidy contracts, mortgage prepayment, or expiration of use restrictions. The Housing Element must identify all federal, state and local subsidized housing in the City, note when the subsidies expire and determine the cost of replacing that housing.

In the 1960's, the federal government provided low-interest loans and rent subsidies through various programs administered by the federal Housing Administration (FHA). In return, private developers/owners agreed to build or operate rental projects which were protected by 40-year low income use restrictions. In order to stimulate private participation, the owners were given the option to terminate their contracts prior to the loan maturity dates. As owners exercise their options, the units may be sold or converted to market-rate units. In many cases the tenants are displaced and the inventory available to lower-income renters declines.

In addition to federally subsidized units, Government Code Section 65583 (a)(8) requires the City to identify and gather information on any projects developed with assistance from any of the following programs, and which are subject to low-income use restrictions which could be terminated within the next ten years:

- FmHA Section 515 Rural Rental Housing Loans;
- HUD Community Development Block Grant Program;
- State (CHFA) and local multifamily revenue bond programs;
- redevelopment programs;
- local in-lieu fees;

and units that were developed pursuant to:

- a local inclusionary housing program; and
- Government Code Section 65916, a density bonus project which has direct financial assistance and affordability controls.

There are no subsidized multifamily rental projects in Cupertino which are at risk to convert to market rate housing during the next ten years (California Coalition of Rural Housing Project, March, 1989). The only units which were developed with assistance from any of the above-referenced programs are 20 affordable rental units located in four projects which were financed from a variety of sources, including the City's Community Development Block Grant (CDBG) Program, Below-Market Rate In-Lieu Fees, Seniors and Handicapped Fund and private funding. The subsidized units are not at risk to be converted to market rate housing because the subsidies are not expected to be terminated and the homes are owned and operated by non-profit organizations.

Income Distribution

Santa Clara County, compared to other counties within California, as well as nationwide, is considered to be an extremely affluent county. Based on the 1980 Census, median household income for the county was \$23,370. In 1990 1992, the median income in Santa Clara County is \$54,000 (State Department of Housing and Community Development, 1990) \$59,500 (State Department of Housing & Community Development 1992).

Among the 15 cities within the county, Cupertino had one of the highest median incomes reported. According to the 1980 Census, median household income was \$30,312, while median family income was \$33,249. ~~A 1985 Census by QED Research indicated that the median household income was \$60,000. The average 1990 household income in Cupertino is approximately \$66,000 (Sedway & Associates, 1990). Real incomes in Cupertino and the County are expected to rise five percent between 1990 and 1995 (Sedway & Associates, 1990).~~ In 1990, the median household income is \$64,587, while the median family income is \$70,671.

Below are the household income distributions in Cupertino in 1980 ~~and~~ 1988 and 1990 (ABAG, 1989):

	1980	1988	<u>1990 (Census)</u>
		(averaged)	
Very Low Income (below 50%)	9%	16%	<u>13.5%</u>
Low Income (50% to 80%)	10%	14%	<u>8%</u>
Moderate Income (80% to 120%)	17%	20%	<u>37.20%</u>
Above Moderate Income (120% & above)	64%	50%	<u>41.5%</u>

HOUSING NEEDS

Level of Payment Compared to Ability to Pay

Overpayment of housing is most often determined by a comparison of monthly housing payment to gross monthly income. By State of California Federal standards, if payment exceeds ~~25~~ 30% of gross monthly income, the household is said to be overpaying. ~~The U.S. Department of Housing and Urban Development standard is 30% of gross monthly income.~~

The current definition of each income category and the resulting "affordability", (i.e., housing is considered affordable when a household pays less than 30 percent of its gross monthly income for towards housing costs) monthly housing payment is shown below.

Relation to Median*	Maximum Income	Affordable Rent*
Household at or below 50% (very low)	\$27,000	<u>28,850</u> \$675 <u>721</u>
Household between 50% and 66% (low) **	\$35,700	<u>38,650</u> \$893 <u>965</u>
Household between 67% and 120% (moderate)	\$64,800	<u>71,400</u> \$1,620 <u>1,785</u>

* Including a utility allowance

** Based on HUD Median Income for a family of four (\$54,000 59,500), ~~02/90~~ 2/92.

*** The common standard of 80% is adjusted down to ~~66~~ 65% by HUD to offset the relatively high median income for Santa Clara County.

The 16% of Cupertino households that earn less than 50% of median income (based on 1988 income) are limited in their choice of housing. In January, ~~1990~~ 1992, the Planning Dept. conducted a survey of large apartment complexes in the City and found average rents for one bedroom apartments at \$737 713/month and two bedroom apartments at \$880 896/month. Rents for one bedroom apartments range from \$530 525/month to \$893 1,050. Rents for two bedroom apartments range from \$585/month to \$1,675 1,600/month (Planning Dept., ~~1990~~ 1992).

The average price of single family homes in Cupertino is \$372,736 374,375 and the average price of condominiums and townhouses is \$205,418 222,541 (San Jose Real Estate Board, ~~May, 1990~~ year end 1991).

~~Determining exactly how many renter and owner households overpay for housing must await the completion of the 1990 Census. However, ABAG has calculated the proportion of households in 1980 who paid more than 25% of their income for housing. These ratios were then applied to the current counts of the number of households. Below are ABAG's estimated total the numbers and proportions of low income households overpaying for housing in Cupertino (ABAG Census, 1990).~~

	Total Number		Percentage of Cupertino's Households	
Low income households (HH) owning	842	<u>914</u>	5.7%	<u>5.9%</u>
Low income HH renting	1,575	<u>1,251</u>	10.6%	<u>8.1%</u>
Low income HH overpaying (owners)	425	<u>436</u>	2.9%	<u>2.8%</u>
Low income HH overpaying (renters)	1,319	<u>1,142</u>	8.9%	<u>7.4%</u>

There is a significantly greater proportion of lower income renter households overpaying for housing than lower-income owners. The estimated proportion of low income owners overpaying is ~~50.48%~~ and the proportion of low income renters overpaying is ~~84% (ABAG, 1989)~~ 91% (Census, 1990).

Rehabilitation/Replacement

The majority of Cupertino's housing is in good condition. Information regarding current rehabilitation needs for Cupertino was derived from the City's 1983-1986 Housing Assistance Plan and is summarized as follows:

- Rehabilitation needs are concentrated in the lower income areas, which are predominantly unincorporated. These households do not have enough disposable income to maintain their dwelling units.
- Approximately 383 units need rehabilitation; 232 (39%) are owner occupied and 151 (61%) are rental units.
- There are no units requiring replacement.

Accessibility

Closely related to the issue of adequate housing is the issue of accessibility of the housing, so that each household regardless of ethnic, economic, age, or marital status is provided with a reasonable choice of locations within the community. Problems that relate to accessibility focus on two main areas: discrimination and landlord-tenant conflicts.

Discrimination

Cupertino refers complaints on discrimination to the Midpeninsula Citizens for Fair Housing, a local non-profit agency, funded through the CDBG program by Santa Clara County to investigate claims of discrimination. The Midpeninsula Citizens for Fair Housing staff reported that the organization received ~~30~~ 11 complaints and worked on ~~44~~ 2 cases involving Cupertino residents during a one year period (July 1, 1988 91 through June 30, 1989 92). The majority of complaints for Cupertino continue to involve discrimination against families with children. In cases where sufficient evidence of discrimination is obtained, clients are referred for legal service.

Landlord-Tenant Issues

Landlord-tenant conflicts center around several areas. The major portion of these problems involve the following:

- Complaints from landlords regarding non-payment of rent and property destruction.
- Claims by tenants regarding unreasonable rent increases.
- Inability of tenants to reclaim cleaning and/or security deposit.
- Claims by tenants of landlords' failure to maintain and repair the buildings and facilities.
- Other issues involve noise, pest and rodent control, etc.

The degree and extent of the problem, if any, is difficult to document. Based on recommendations from the City's Rental Housing Subcommittee, a voluntary mediation process for Cupertino residents and landlords was established. The City provides \$19,600 19,950 annually from the City General Fund to ~~Operation~~ Project Sentinel for the administration of this program.

Energy and Housing

Energy conservation can benefit Cupertino on an economic level as well as preserve non-renewable resources for future consumption. Investments in energy conservation reduce utility costs and enable increased efficiency.

~~The City has an Energy Commission consisting of 7 persons appointed by the City Council to make energy conservation recommendations to the Council. In the past the Energy Commission has provided energy conservation workshops and information for small businesses, restaurants, and individuals. As a result of the Commission's recommendations, Cupertino requires that all multi-family units are be plumbed at the time of construction for solar energy and all multifamily and single family residential clothes dryer outlets accommodate both gas and electricity.~~

New Construction Need Based On ABAG'S Regional Housing Allocation

The State of California Department of Housing and Community Development has authorized ABAG to determine housing needs for each city and county in the San Francisco Bay region (Government Code Section 65584). Government Code Sections 65580-65590 require that cities must show ample opportunity for housing development to meet regional housing needs as defined by ABAG and remove obstacles to meeting such need. State law does not require that cities actually produce or operate the housing, nor participate in subsidy programs. Opportunity means that a jurisdiction shall identify sites for housing and make adequate provision for the existing and projected needs of all economic segments of the community.

ABAG allocates the regional share of housing need for each jurisdiction by considering six local factors: market demand for housing, employment opportunities, availability of suitable sites and public facilities, commuting patterns, type and tenure of housing, and housing needs of farmworkers.

The total regional share of housing need is distributed into four income categories: very low, low, moderate, and above moderate. ABAG moves each jurisdiction toward the regional distribution by averaging the existing city percentages with the existing county and regional percentages to determine the percentage to be applied to the projected housing need. For example, the City of Cupertino (with 9% very low) is averaged with Santa Clara County (17% very low) and the region (23% very low) to derive a projected 16% very low ($9+17+23=49$; $49/3=16$).

Given these factors, ABAG projected the 1988-1995 housing need for Cupertino to be 3,174 units, as summarized below.

Of the 3,174 units projected by 1995, 1,343 units are to be obtained through ABAG's recommendation that Cupertino consider "Alternative Zoning," (i.e., revisions in the City's Zoning Ordinance or other City actions which would allow additional housing). Alternative Zoning Projected Need figures in ABAG's Housing Needs Determination Report were established only for the 39 Bay Area cities where the expected job growth will exceed the projected housing development by more than 500. Cupertino was one of these 39 cities. Alternative Zoning figures do not mean that a City's existing Zoning Ordinance must or should be modified to accommodate projected housing need, but rather a City could take other actions such as identifying specific "in fill" sites, and encouraging second units.

The number of units needed for 1990-1995, is based upon the following:

	ABAG (1988-1995) *	Units Produced (1988-1989)	Adjusted Needs (1990-1995)	
Very Low	508	28	480	**
Low	444	7	437	***
Moderate	635	19	616	****
Above Moderate	1,587	639	948	*****
Total	3,174	693	2,481	

* ABAG, Housing Needs Determinations, January 1989.

** Includes 18 shared units (Project Match) and 10 units in a congregate care residence (Chateau Cupertino).

*** Shared units.

**** Includes seven shared units (Project Match), 10 Mortgage Credit Certificates (MCC's) and two second (accessory) units.

***** Includes the following units:

	New Construction	Annexation	Units Demolished	Net Gain
1988	453	7	19	441
1989	197	14	13	198
			Total	639

ADEQUATE SITES INVENTORY

One of the functions of the Housing Element is to analyze the capacity of suitable and developable sites to meet identified housing needs. Cupertino is a community which is mostly built out. The hills to the west provide environmental constraints to high density development and annexation potential is generally limited to the Urban Service Area since the adjacent communities are also urbanized with little developable land available. Therefore, most new housing developments will be urban infill.

During the five year planning period (1990 - 1995), it is projected that 513 total additional housing units, approximately 103 units/year, will be constructed within the incorporated portions of the City. This will bring the total number of housing units in the City to 15,559, an increase of approximately 3%. The projected units include 240 homes on vacant land and 273 homes on underdeveloped land, as shown below.

Projected Housing Units (1990 - 1995)

	Vacant	Underdeveloped	Total	
Single Family Detached	210	169	379	(74%)
Single Family Attached	30	96	126	(24%)
Multi-Family	0	8	8	(2%)
Total Units	240	273	513	

The projected number of units (513 units) during the five year planning period is approximately 40% of the projected new units (~~1,369~~ 2,584 units) at buildout in the year 2000. This is based upon the assumption that the larger projects (i.e., the Seminary site, and the Quarry site and the non-residential areas) will not be developed during the five year planning period. There are currently no development plans for these projects and the planning process, prior to construction, will be lengthy. Therefore, the projected units during the five year planning period are expected to be mostly on the smaller sites.

~~The number of projected housing units consists of units specifically allowed by the existing General Plan. It does not reflect additional units that are possible through other programs. For example, Program 8 allows mixed use developments without penalty to permitted floor area ratios, and Strategy 3 under Policy 2-24 allows residential developments to exceed planned density maximums if they met a special community social goal. Therefore, areas do not need to be specifically rezoned to allow greater density, particularly related to density that might be required for multi-family housing opportunities. The number of potential units possible under these circumstances has not been determined since these are not site specific programs. However, studies could be undertaken to determine the appropriateness and capacity of specific areas for mixed use and higher density residential development.~~

Appendix B, Sites for Housing Development Map, shows the location of the land available for residential use within the City limits based upon the existing land use plan. [This map will be updated and provided later] Appendix C, Description of Sites for Housing Development, shows the size (acreage), potential number of additional units, zoning and type of units for each site.

Nearly ~~a~~All of the housing sites depicted in Appendix B and Appendix C are within the city limits and have adequate services available to accommodate their potential development. ~~The existing General Plan land use designations and zoning for these areas would accommodate the potential development~~ Each housing site is relatively close to major transportation corridors served by the Santa Clara Valley Transit District. Each site is relatively close to shopping and other community support activities.

None of the sites is affected by a particularly adverse noise environment which could not be mitigated through normal construction and site planning techniques. Additionally, the City of Cupertino's Planned Development Ordinance and Single-Family Cluster Residential Ordinance contain mechanisms to insure that high intensity development can be designed to provide a healthy living environment for potential residents.

Vacant Sites

There are 29 vacant housing sites, which could yield a total of 240 (maximum) units, including ~~210~~ 114 single family detached homes and ~~30~~ 416 single family attached homes. With the exception of ~~four~~ six sites, the vacant land consists of small infill sites (i.e., with the potential for less than 10 units). The bulk of the units would be located on the site on Stevens Creek Blvd. near De Anza Blvd (Site #12, single family attached homes) ~~and the Inspiration Heights site (Site #65, single family detached units)~~ the Seminary property (Site #75, single family detached homes), and the Mariani property at DeAnza Blvd. and Homestead Road (#91, single family attached homes).

Underdeveloped Sites

There are a total of ~~61~~ 62 developed sites which have the potential for a total of ~~273~~ 573 (maximum) additional units, including ~~169~~ 371 single family detached homes, ~~96~~ 185 single family attached homes and ~~8~~ 17 multi-family units.

With the exception of seven sites, the underdeveloped land consists of small infill sites (i.e., with the potential for less than 10 units). The bulk of the units would be on ~~two~~ three sites: Homestead North (Site #71, single family attached homes) ~~and Seven Springs (Site #74, single family detached homes).~~ and Kaiser Industrial Plant (Site #92, single family detached).

Land Inventory Summary

Below is a summary of the existing (1990) and projected (1995) total number of housing units within the City, by type.

	Existing (1990) Units *	Projected (1990-1995) Units	Total (1995) Units
Single Family Attached **	1,986	126	2,112
Single Family Detached **	9,022	379	9,401
Multifamily **	4,032	8	4,040
Mobile Homes	6	0	6
Total	15,046	513	15,559

* January 1, 1990 estimates by the State Department of Finance Demographic Research Unit.

** The density range for single family includes both detached (0-5 du/ac) and attached (5-35 du/ac) units. The density range for multi-family units is 5-35 du/ac. Most of the multi-family units in Cupertino will be at the upper end of this range.

CONSTRAINTS TO THE DEVELOPMENT OF HOUSING

Governmental Constraints

Land Use Controls

Cupertino's land use regulations allow for densities as high as 20-35 units per acre at DeAnza Boulevard/Interstate 280 and DeAnza Boulevard/Rainbow Drive. High density development has averaged 22 units/acre. Setbacks and open space requirements also are not a constraint to the development of affordable housing. The Zoning Ordinance generally requires minimum front and rear setbacks of 20 feet and a maximum lot coverage of 40%. However, high density housing would most likely be developed under a Planned Development permit and consequently, the zoning ordinance would be used only as a guideline. A General Plan strategy (page 2-22) allows residential developments to exceed planned density maximums if they meet a special community social goals and the increase in density will not overload neighborhood streets or hurt neighborhood character. Additional residential density increases would be available under the provision of Government Code Section 65915, if the City granted density bonuses and other incentives to the developers of low and moderate income housing. Therefore, density regulations are not a constraint to further residential development.

Most of Cupertino's remaining commercial and industrial land is owned by industrial firms and will be used for their expansion. However, the City's Land Use Element provides incentives for mixed use projects, whereby a developer of commercial or industrial land is allowed to add residential units without penalty in terms of floor area ratio.

Cupertino's land use regulations allow for a significant increase in housing potential above the existing housing stock. While hillside development is low density due to inherent environmental constraints, the neighborhoods, to some extent, and the urban core, to a greater extent, create the potential for approximately 2,500 new units. The potential is created through a variety of strategies. The primary strategy is density control. The hillside densities consisted of four slope density designations: foothill modified, foothill 1/2 acre modified, semi-rural 5 acre and 5-20 acre. Densities decrease as slope and other environmental constraints increase. The suburban and urban densities consist of Low (1-5), Medium/Low (5-10), Medium/High (10-20), High (20-35 and 35-50), and Mixed Use. High Density development is allowed in the urban core, along major transportation corridors.

A major new land use strategy is to designate traditionally non-residential areas as appropriate for residential and mixed-use development. The rationale for this strategy is that additional housing opportunities are needed to help balance job growth, and that the locations should be near job centers and transportation corridors. Higher density development is appropriate in these areas because it can be buffered from lower density residential, and it provides the opportunity for affordable housing and the potential ridership for future transit. The Stevens Creek Boulevard corridor, the Vallco area, and the North DeAnza area, allow office/industrial and residential uses. The Bandle Drive and Bubb Road areas also allow these uses; in addition, they will be studied to determine the feasibility of requiring mandatory residential use. Additional residential density increases would be available under the provision of Government Code Section 65915, if the City granted density bonuses and other incentives to the developers of low and moderate income housing.

Further land use controls are height, setback and design controls. Hillside regulations restrict development on ridgelines, steep slopes, riparian corridors, and hazardous geological areas. All hillside and neighborhood residential development controls height, setback, lot coverage and the floor area ratio. Urban core residential development protects residential neighborhoods with buffering, setbacks, landscaping, walls activity limitations, and site design requirements.

Codes and Enforcement

Code enforcement refers to both zoning and building violations, which sometimes overlap as in the case of illegal room additions. The Zoning Ordinance is concerned primarily with illegal structures or uses while the Building Code is concerned with construction violations.

Zoning code enforcement is accomplished on a complaint-response basis. This procedure involves investigation of zoning violations by City staff based upon complaints from neighbors or tenants. When a violation is reported, an on-site investigation is made. If a violation is occurring, a letter is sent to the building owner. Depending on the response, the matter may be referred to the City Attorney.

Cupertino's Building Code is not a serious constraint to residential development. New construction is required to meet Uniform Building Code regulations. However, there is no ongoing systematic enforcement of the Building Codes upon existing dwelling units unless there have been complaints received by the City or the resident is seeking a permit for additional construction. Certain types of room additions would require the applicant to bring the building (or part of it) up to existing codes. Building Code violations should be brought to the attention of new owners through real estate disclosure laws.

Infrastructure

The existing public facilities and utilities can accommodate future residential development. However, substantial increases in commercial and industrial densities would affect the circulation system. Whenever commercial and/or industrial development impacts circulation and causes further imbalance in the jobs and housing ratio, mitigation measures ~~may~~ will be required as part of the permit approval process.

The City's typical improvement requirements include half-street, curb, gutter, and sidewalk. A residential street has a 60 foot right-of-way and measures 40 feet from curb to curb. Water service is available throughout the City. Central sewage is also available, except in the hillsides where alternative methods of sewage disposal are necessary.

Permit Approval Process

Development review also affects housing costs. Because of interest rates and inflation, the longer it takes for a development proposal to be approved, the higher the development costs. Prior to beginning residential development in Cupertino, an application must be submitted to the Planning Department. Plans for the construction of an individual single family home may be approved by the Planning Department staff. Other projects may require approval by the Planning Commission and the City Council before applying for a building permit.

The average processing time for projects not approved by staff, from the date of initial application is approximately two months from the date of initial application. Large projects generally take longer, particularly if extensive environmental review is required. Cupertino's development review process is similar to many other Peninsula cities.

~~A study by the Bay Area Council in 1988 indicated that development fees required in Cupertino are slightly lower than other cities in the vicinity (Bay Area Council, 1987). The total fees for a new 1,434 square foot, single family starter home in Cupertino was \$8,257 compared to an average fee of \$8,406 in the other cities within the County for a similar home. The average fee in the Bay Area for a similar home was \$9,110. In 1987, the development fees for a new 1,434 square foot single family home in Cupertino included the following:~~

Planning	\$53
Building	808
School impact	473
Traffic impact	240
Parks, recreation & open space	5,000
Growth fees and taxes	283
Utilities	1,400
Total development fees	\$8,257

A survey by the Building Industry Association of Northern California (1991) compared planning a prototype, building, impact and utility fees of numerous cities in the greater Bay Area. The average total fees for projects in 1991 were \$13,763. Cupertino's total was \$20,114. The reason for the higher total is the \$15,750 park fee. In comparing Cupertino's fees to other jurisdictions, the non-park fees are the same or lower than others. The park fee is not a deterrent to providing affordable housing, however. The City Council may waive fees for affordable housing, and fees will automatically be waived in the case of affordable housing provided as mitigation.

~~Due to increasing land costs, Cupertino's parks and recreation fee has increased since 1987. The average park land dedication fee in Cupertino for a single family home is currently \$15,750. However, the parks and recreation fee is not a constraint to the development of affordable housing. A portion or all of the required fees may be excused for affordable units. The procedure for excusing fees is through the development approval process, whereby the City Council may include fee waiver as a condition of development if affordable units are proposed for the project. In addition, there is priority processing of proposals that include affordable units. Development regulations can also be modified to encourage low and moderate income housing units.~~

Article 34

Article 34 of the California Constitution requires a positive vote of the electorate in order to allow the construction of low cost publicly owned, developed, or financed housing. A referendum was submitted to the voters on the Le Beaulieu project for physically handicapped and was approved in November 1982. The need for an Article 34 referendum will be determined on a case by case basis, although a ballot measure need not be site specific and could be a general measure if desired.

Non-Governmental Constraints

Cost of Land

Market constraints significantly affect the cost of housing and are important factors when discussing affordable housing. The cost of land in Cupertino, more than any other factor, constrains the development of affordable housing. A subdivided 10,000 square foot lot in Cupertino is currently valued at approximately \$300,000 (Sisk, 1990).

Because the City is relatively built out, there is not an abundant supply of undeveloped land, a factor which pushes up prices further. Land prices in Cupertino depend on a number of factors, including: the allowable density and type of residential development suitable for the property, the proximity to the freeway and commercial developments, and the quality of nearby existing development.

Cost of Construction

Construction costs in Cupertino are comparable to the San Francisco region as a whole. An ongoing survey of construction costs in the San Francisco Bay Area conducted by the Bank of America reveals that materials and labor costs are continually increasing. In July 1983, the per square foot construction cost of a typical, three-bedroom/two-bath, standard quality, single-family home was \$46.73. By July 1987, the per square foot construction cost of an identical home had risen to \$53.67, an almost 15% increase in four years (Bank of America, 1987).

Availability of Financing

The cost of borrowing money to finance the construction of housing or to purchase a home has a large impact on the amount of affordable priced housing produced and subsequently purchased in a community. Fluctuating interest rates can eliminate many potential homebuyers from the housing market or render infeasible a housing project which, at lower interest rates, could have been successfully marketed. Rental housing costs are also affected by higher interest rates, since the owner will pass added costs directly to the tenant in the form of higher contract rents.

Financing is generally available to those who can afford the housing payments and have a down payment. Interest rates are not significantly different than other areas in Northern California. Current prevailing interest rates for a conventional single-family mortgage are about 10% to 11% in 1990, (assume 30-year fixed rate loan, 80% loan to value ratio). These rates represent a noticeable decline from the mid-1984 rates of 13% to 14% for comparable loans. There are no mortgage deficient areas in the City.

GOALS, OBJECTIVES, POLICIES AND PROGRAMS

New policies and programs are proposed to encourage or require providing improved housing opportunities. State law requires that Cupertino address identified regional housing needs and the relationship between job creation and housing needs. Housing information shows that a number of factors contribute to a housing shortage in Cupertino. Cupertino is an employment center which provides more jobs than employed residents, resulting in a competition for housing. Housing prices are high and vacancy rates are low, making it particularly difficult for low and moderate income households to find housing. In the past, housing provided has been largely market rate; even though regulations provide for construction of affordable housing, it has not been built. If additional measures are not taken to provide housing, traffic congestion and air quality will deteriorate due to increasing in-commuting of workers. Employment centers will have difficulty hiring employees, and some Cupertino residents who may need to change their living situation, such as young families or the elderly, will have limited options.

This section outlines Cupertino's objectives, goals, policies and programs over the ~~next~~ five year period. Quantified objectives over the next five year term (1990-1995) are stated. Programs are linked with potential funding sources and entities responsible for implementation.

Below is a summary of the City's quantified objectives over the five year planning period (1990-1995).

Units Conserved: (Housing units preserved as rentals because of the City's Conversion Ordinance or through existing programs).

- Approximately 5,900 duplexes, triplexes and apartments can be preserved if no conversions occur. Should conversions occur, a percentage of the units will be dedicated to below market rate households.
- Maintain the 27 units for the handicapped and 20 units in congregate care residences.
- 63 very low and low income households can be assisted through the Section 8 Existing Program and 80 households can be assisted through Project Match or a similar matching service.

Rehabilitation of 20-30 low income owner units.

SUB-TOTAL: 6,110-6,120 Units Conserved

Very Low & Low Income:

- 140-190 units of subsidized rental housing for a variety of constituent groups by both profit and non-profit developers.
- 20 units could be developed as second units.

SUB-TOTAL: 160-210 New Construction Very Low & Low Income Units.

Moderate Income:

- Approximately 5 family ownership units could be provided by Mortgage Credit Certificates (MCC's).
- 20 family units through mixed use developments.

SUB-TOTAL: 25 Moderate Income Units.

Above Moderate Income:

- 513 units can be constructed in the above moderate income range.

SUB-TOTAL: 513 Above Moderate Income Units.

The City's goals, policies and programs are summarized below.

EXPAND THE SUPPLY OF HOUSING

Goal A: Expand the supply of residential units for all economic segments to achieve greater opportunity for current and future Cupertino employees and residents to obtain housing.

Policies

Policy 3-1

~~Exceed density levels above those designated in the General Plan on projects which are found to satisfy a social goal of the community. The increase in density is contingent upon a finding that the project will not overburden public services, utilities, the road system, and will be in harmony with adjacent land uses.~~

Policy 3 -2

Allow approximately 1,500 units in the existing non-residential areas.

Strategy: Prepare specific plans for planning districts where change is proposed.

Policy 3-3

Encourage high density affordable housing with density bonuses.

Policy 3-4

Consider specific locations within the change areas for mandatory residential or mixed use:

Bandley Drive, in North De Anza Boulevard area

Bubb Road

Portions of Stevens Creek Boulevard:

North side: between the west boundary of the "Magic Wok" on Saich to Stelling

South side: between the west boundary of Union Church and Stelling

Study these areas to determine the feasibility of mandatory residential or mixed use and rezone them if determined feasible.

Policy 3-5

Consider surplus school and urban church sites for higher density and mixed use housing.

Policy 3-6

Other areas to consider which require more study are:

Stelling between 280 and Stevens Creek

Rancho Rinconada near Cupertino High School

Monta Vista area near railroad tracks

City lands

Policy 3-7

Allow a density bonus if a transfer of development credit (TDC) program is adopted which allows transfer of potential residential units from one location to another.

Strategy:

Consider adopting a Transfer of Development Credits (TDC) program.

Policy 3-8

Discount parking standards for mixed use developments.

Policy 3-9

Set landscaping, open space and setback standards so there are minimum standards that must be met.

Policy 3-10

Set high standards of design for high density/mixed use projects to ensure high quality development and to reduce off-site impacts.

Strategy:

Include specific development standards in the specific plans and zoning ordinances.

Policy 3-15

~~Encourage developers to follow innovative design concepts which integrate residential and non-residential uses within a single project.~~

Policy 3-16

~~Permit commercial and industrial developers to add residential units without penalty in terms of floor area ratios established in the Land Use Element in order to provide mixed use developments. All development proposals will be subject to Planning Commission and City Council review.~~

Policy 3-17

~~Conduct a study to determine the relationship between land uses and housing needs and possible assessment procedures for paying fees, providing housing units, or contributing toward mitigation in other ways. The City shall then require that all kinds of development where such a relationship is established shall mitigate increased needs for affordable housing through fees and in other ways such as direct provision of needed units as part of the development.~~

Policy 3-18

~~Review all vacant and uncommitted commercial and industrial lands every three years to determine if potential exists for rezoning to residential, and ascertain availability of surplus school sites for housing.~~

Policy 3-11

Allow accessory housing units on certain lots in single family districts.

Policy 3-12

Cooperate with the county, private and non-profit housing developers to identify sites for very low, low and moderate income housing.

Policy 3-13

Foster a conducive environment for attracting low and moderate priced housing programs financed by other levels of government. The use of mortgage revenue bond programs will be encouraged. All such developments will meet the City's design and service criteria.

Policy 3-14

Participate in available county, state and federal programs that promote or provide housing.

Policy 3-15

Continue to make Housing and Community Development (HCD) funds available to developers to help defray costs inherent in meeting or exceeding the requirements for supplying below market rate housing.

Policy 3-16

Make available HCD or general funds for site acquisition for low and very low priced housing. Parcels purchased with HCD or general funds can be made available to private developers or a non-profit housing corporation capable of constructing low and very low priced housing.

Policy 3-17

Use City funds for programs that help supply affordable rental housing to low and very low income households, particularly senior citizens and disabled individuals who are on a fixed income. The City will contract with a non-profit organization or use other mechanisms to supply this housing. Need will be identified through census and other data. Priority will be given to Cupertino residents.

Policy 3-18

Give priority processing to applications that provide very low, low and moderate income housing to reduce development costs associated with time delays.

Policy 3-19

Place the issue of affordable housing on the ballot to obtain Article 34 referendum authority should this be necessary to provide for affordable housing.

Policy 3-20

Encourage the conversion of existing market rate rental units to affordable rental units.

Policy 3-21

Encourage long-term leases of property from churches, school districts and corporations for construction of affordable rental units.

Policy 3-22

Give first priority in any affordable housing projects to individuals who reside, work, attend school, or have family in Cupertino.

Policy 3-23

Utilize the City's Affordable Rent Schedule as a guideline in setting rents for new affordable housing.

Policy 3-24

Update the rent schedule each year as new income guidelines are received from the state and federal government. Determine a uniform method for allowing rent adjustments for affordable housing projects that are developed.

Policies 3-24 to 33 apply to Office and Industrial Housing Mitigation

Policy 3-24

Apply housing mitigation for office and industrial development to 1.1 million square feet of unbuilt office/R&D space in the existing General Plan and 2.0 million square feet above the current General Plan.

Policy 3-25

Mitigate new office/industrial development by providing at least 15% of the nexus study housing demand by creating 28 units per 100,000 square feet of development. [The breakdown of these units, eligibility of the buyers and term of affordability shall be reviewed by the Affordable Housing Committee at their January 1993 meeting and comments then referred to Council]

Policy 3-26

Meet a portion of companies' affordable housing mitigation requirement by their buying and converting existing market rate units within the City or within a two-mile radius of their projects. These units, which would leave the market-rate arena, would be "replaced" with new market rate units, satisfying overall mitigation requirements. If these conversation units are proposed to be located outside Cupertino, the companies, along with the City, will approach ABAG and/or HCD to argue that the City should receive a transfer credit so that such units count toward meeting the City's fair share housing goals. If granted, Cupertino would extend the same consideration to companies developing in adjacent cities. If unable to obtain concurrence from ABAG and/or HCD, such conversations outside the city would not be credited toward satisfying the mitigation requirement.

Policy 3-27

Create an option to pay an in-lieu fee. The in-lieu fee shall be set at \$5.00/sq. ft. and should be adjusted annually based upon the CPI or another inflator.

Policy 3-28

Waive park fees and construction tax for any affordable units.

Policy 3-29

Create a housing development bank allowing office and industrial development without concurrent housing development. The housing development must be completed within one year of the completion of the office and industrial development.

Policy 3-30

Involve public from the beginning when affordable housing is planned so that there are fewer objections to the project when it goes through the City approval process. Development applications with affordable units will receive priority processing to streamline the process but must still meet legal noticing requirements.

Policy 3-31

Locate housing units on employment center sites or in areas that could be designated for higher density housing, such as Bubb Road, Bandley Drive, City Center Area, and within 1/4 mile of employment centers.

Policies 3-34 to 41 apply to Housing Mitigation of Residential Development

Policy 3-34

Require every residential development to participate in the BMR program with the exception of : Affordable housing developments, Office and industrial developments with other housing mitigation requirements.

Policy 3-35

Emphasize on-site development of the BMR units. Second priority would be off-site BMR units located within the City limits. If the developer can show that neither option is economically feasible, then an in-lieu fee may be paid. A standard to measure the economic feasibility of projects shall be developed by staff and reviewed for comments by the Building Industry Association or an equivalent organization prior to review by the Affordable Housing Committee.

Policy 3-36

Allow developers to meet all or a portion of their BMR requirement by making land available for the City or a non-profit housing developer to construct affordable housing.

Policy- 3-37

Require ten percent (10%) of a residential development to be BMR units.

Policy 3-38

Waive park dedication fees for affordable units.

Policy 3-39

Assess an in-lieu fee at the rate of 2% for developments of less than seven units. For developments of seven or more units, a comparable BMR unit must be developed unless the developer can prove the development of the BMR units is not economically feasible. In such cases, the 2% in-lieu fee would then be applicable to the project. A standard to determine economic feasibility shall be developed. The in-lieu fees shall be collected at the building permit stage and the basis of the fee is to be determined later.

Policy 3-40

Require BMR units to remain affordable for a minimum of 30 years

Policy 3-41

Utilitize in-lieu fees the City receives in the following manner (ranked in order of priority):

- a. Finance affordable housing projects in Cupertino.
- b. Establish a down payment assistance plan that may be used in conjunction with the BMR program or to make market rate units more affordable. The assistance should be in the form of low interest loans and not grants.
- c. Establish a rental subsidy program to make market rate units more affordable. In-lieu fees collected from office, industrial and retail development will also be used in this manner.

Policy 3-42

Investigate and encourage various financing strategies including, but not limited to, the following

Local and county bond financing.

Bank financing of mixed use projects.

Pension funds as sources of financing.

Transfer tax for sales of property.

Redevelopment agency reactivation.

Policy 3-43

Create a Housing Endowment Program for the creation of affordable housing units.

Policy 3-44

Ensure the long-term viability of affordable housing projects by requiring the developer to provide an adequate reserve for long-term maintenance.

Policy 3-45

Permit the construction of mobile homes and pre-fabricated houses on permanent foundations, subject to compliance with zoning regulations, building code, and other applicable City regulations.

Policy 3-46

Conversion of rental forms of multiple family housing to condominiums will not be permitted if the proposal significantly diminishes the present number of rental units within Cupertino or substantially reduces the ratio of ownership-to-rental units in effect at the time of the requested conversion. As a general guide, rental units shall not be converted to single family ownership housing when the rental vacancy rate within the Cupertino Housing Market Area is less than 5% at the time of application and has averaged 5% over the past six months. The vacancy rate will be determined by surveys conducted by the City of Cupertino's Planning Department.

Policy 3-47

Prior to approving any condominium conversions, insure that a significant portion of the converted units remain part of the low and moderate income housing stock.

Policy 3-48

Prior to approving any condominium conversions, insure that the project has been upgraded to eliminate any health and safety hazards and to meet current development standards. The city shall also reasonably demonstrate that comparable replacement rental housing exists within the Cupertino area to accommodate the displaced residents.

Policy 3-49

Work with local organizations to implement a program to provide a temporary emergency shelter that would rotate monthly among local churches.

Programs

Program 1

Prepare specific plans for existing non-residential areas which will incorporate residential uses, and include specific development standards.

Responsible Agency: Planning Department

Funding Source: Property Owners/developers

Time Frame: Beginning 1993

Program 2

Study specific locations to determine the feasibility for mandatory residential or mixed use: Bandle Drive, Bubb Road, and portions of Stevens Creek Boulevard.

Responsible Agency: Planning Department

Funding Source: Staff Time

Time Frame: 1993

Program 3

Consider additional locations for future residential use: Stelling between 280 and Stevens Creek, Rancho Rinconada near Cupertino High School, Monta Vista area near railroad tracks, and City lands.

Responsible Agency: Planning Department

Funding Source: Staff Time

Time Frame: 1994

Program 4

Consider adopting a Transfer of Development Credits (TDC) program.

Responsible Agency: Planning Department

Funding Source: Staff Time

Time Frame: 1995

Program 5

Discount parking standards for mixed use developments.

Responsible Agency: Planning Department

Funding Source: Staff Time

Time Frame: 1993

Program 6

Set Minimum landscaping, open space and setback standards for higher density and mixed use programs.

Responsible Agency: Planning Department

Funding Source: Staff Time

Time Frame: 1993

Program 7

Set high design standards for higher density and mixed use projects.

Responsible Agency: Planning Department

Funding Source: Staff Time

Time Frame: 1993

Program 8

Continue Second Unit Ordinance. Provide information regarding opportunities for second units to property owners through public contact and publications.

Responsible Agency: Planning Department

Funding Source: Staff Time

Time Frame: Ongoing

Program 9

Work with county, state, federal and private agencies active in developing affordable housing. Use HUD funds to finance infrastructure improvements.

Hold bi-annual City Council hearings to review the progress of agencies receiving CDBG funds and proposals from non-profit agencies to provide housing and housing services. Allocate annual CDBG funds of approximately \$140,000 to housing and housing related services. Meet at least quarterly with other city and Council CDBG staff to coordinate funding strategies including a Housing Trust Fund. Maintain contact with non-profit housing developers to explore possible affordable housing projects.

Responsible Agency: Planning Department/~~Housing and Services Coordinator~~

Funding Source: Staff Time, HUD

Time Frame: Ongoing

Program 10

Construct assisted family and elderly rental housing, using federal or state subsidies if available, in proportion to the needs identified.

Responsible Agency: Planning Department

Funding Source: Section 8; Section 202 Land Acquisition (CDBG)

Time Frame: 1990-1995

Program 11

Continue participation in Section 8 (Existing) to assist very low and low income families and elderly households. Continue to accept Section 8 certificates and vouchers provided by the Housing Authority. Sponsor a workshop for Cupertino landlords to encourage Section 8 participation.

Responsible Agency: Santa Clara County Housing Authority

Funding Source: Section 8

Time Frame: Ongoing

Program 12

Develop rental and affordable ownership housing opportunities through the following combination of programs:

- Continue priority processing of developments that have low and moderate income units;
- Identify the most suitable sites and determine the availability of surplus school sites;
- Excuse all or a portion of development fees for projects that include low and moderate income units, if there would be no effect on the health, safety and welfare of the community;
- Develop additional methods for providing funding and housing units such as revenue bond financing, ~~housing mitigation fees, or inclusionary zoning requirements. Require mandatory programs to insure developer participation.~~

Adopt a method to implement density bonus increases according to Government Code Section 65915 and develop a specific fee waiver program;

- Use City funds to assist a non-profit organization to develop rental units for low and very low income households. Several funding sources are currently being considered. After a funding source is established, the City will issue a Request For Proposals to appropriate non-profit organizations which would be responsible for designing, implementing, and managing the housing.

Responsible Agency: Planning Department/Housing and Services Coordinator

Funding Source: CDBG, developers of mixed use sites, Staff Time

Time Frame: Ongoing

Program 13

Determine the necessity of an Article 34 Referendum. Consider holding a general election to cover the maximum number of affordable housing units expected over a multi-year period.

Responsible Agency: Staff Reports to City Manager

Funding Source: City Funds

Time Frame: As Needed

Program 14

Participate in Mortgage Credit Certificate programs to provide ownership housing for moderate income households.

Responsible Agency: City continues to participate with the County

Funding Source: Bond Sales, Staff Time

Time Frame: Ongoing

Program 8

~~Encourage mixed use developments through the City's land use policies. Analyze all proposed residential and non-residential developments for potential mixed use. Consider appropriateness based on surrounding area and access to transportation and services. Develop methods for determining appropriate shared parking arrangements for mixed use developments. Develop a policy on the ratio of retail/office development to housing to encourage more housing units. The City regulates non-residential development through floor area ratios (FAR's). However, since housing constructed in conjunction with non-residential development is excluded from the FAR calculation, a developer is thereby encouraged to provide housing in areas otherwise reserved for non-residential growth.~~

~~Responsible Agency: Planning Department/Housing and Services Coordinator~~

~~Funding Source: Staff Time~~

~~Time Frame: Ongoing~~

Program 9

~~Review vacant lands for potential rezoning, including rezoning non-residential land to residential uses and increasing the permitted intensity of residentially-zoned parcels. Identify areas and parcels appropriate for rezoning to allow residential uses, particularly mixed use and increased densities.~~

~~Responsible Agency: Planning Department~~

~~Funding Source: Staff Time~~

~~Time Frame: Ongoing~~

Program 15

Continue to support matching services for low income elderly households. Annually evaluate the effectiveness of senior matching services.

Responsible Agency: Planning Department/Housing and Services Coordinator

Funding Source: Staff Time, CDBG

Time Frame: Ongoing

Program 16

Continue to use CDBG funds to reduce costs in supplying affordable housing. The City has established a housing fund with CDBG monies.

Responsible Agency: Planning Department/Housing and Services Coordinator

Funding Source: City Funds, CDBG

Time Frame: Ongoing

Program 17

~~Work with local organizations to implement~~ Continue to support a program to provide a temporary emergency shelter that would rotate monthly among local churches. ~~Amend the BQ zoning district to allow emergency shelters as conditional uses.~~

Responsible Agency: Planning Department/Housing and Services Coordinator

Funding Source: Staff Time

Time Frame: ~~1994~~ Ongoing

PRESERVE AND ENHANCE NEIGHBORHOODS

Goal B: Establish and enforce effective guidelines and regulations for the construction of safe, quality housing, and for the maintenance and improvement of existing housing.

Policies

Policy 3-50

Continue the high quality of maintenance of public streets, rights of way and recreational areas. Continue the semi-annual trash pick-up program throughout the City and encourage its implementation in the unincorporated area within the Sphere of Influence.

Policy 3-51

~~Continue the functions of the Energy Commission to promote energy conservation measures through its workshops and recommendations to the City Council.~~

Policy 3-52

Continue current code enforcement efforts within the corporate limits and encourage the Santa Clara County Board of Supervisors to increase code enforcement in county islands and land within the City's Sphere of Influence.

Policy 3-53

Support local neighborhood improvement districts and homeowner associations. In upgrading residential property, a neighborhood approach should be used, allowing as much local participation as possible. The approach should be service oriented, offering services such as incentives for rehabilitation.

Policy 3-54

Encourage citizens to continue to maintain existing residential properties in a manner which enhances the character of Cupertino.

Policy 3-55

Continue to ~~Offer~~ a presale code inspection program for residential structures.

Policy 3-56

Continue participation in the Housing Rehabilitation Loan Program financed through the Urban County Housing and Community Development Block Grant Program. The Rehabilitation Program provides low-interest rate loans and small grants to very low and low income households to correct building code violations and to correct housing deficiencies. The program is targeted for owner-occupied units.

Policy 3-57

Investigate and pursue other federal, state and county funded programs available for expansion of rehabilitation activities.

Policy 3-58

Encourage the upgrading and rehabilitation of substandard housing within the City's Sphere of Influence.

Policy 3-59

Provide information on loan programs. Periodic features in the local media will be encouraged.

Policy 3-60

Actively promote energy conservation techniques and energy efficiency in building design, orientation and construction. The relationship between energy conservation and its impact on housing costs should be explored to insure that any selected program does not reduce the supply of affordable housing.

Policy 3-61

Re-examine the residential zoning ordinance to insure that limitations regarding mechanical apparatus do not unduly inhibit solar energy use.

Policy 3-62

Investigate and pursue information regarding energy conservation programs or policies that are being implemented by other California cities.

Programs

Program 18

Conserve low income handicapped units and units in congregate care residences. This will be accomplished by maintaining the rent of the handicapped units at rates affordable to low income persons.

Responsible Agency: Planning Department

Funding Source: Staff Time

Time Frame: Ongoing

Program 19

Continue code enforcement and maintenance of public areas.

Responsible Agency: Planning/Public Works Department

Funding Source: City Funds

Time Frame: Ongoing

Program 20

Provide low interest rate loans or grants to very low and low income households to correct building code violations and housing deficiencies per the City's Rehabilitation Guidelines. The program is targeted at owner-occupied units. If sufficient funds are available, loans will be made to rehabilitate rental units.

Responsible Agency: ~~Housing and Services Coordinator~~ Planning Department

Funding Source: CDBG

Time Frame: Ongoing

Program 21

Continue the Condominium Conversion Ordinance to preserve the existing supply of affordable rentals.

Responsible Agency: Planning Department

Funding Source: Staff Time

Time Frame: Ongoing

Program 22

Provide information on loan programs through the Rehabilitation Program.

Responsible Agency: ~~Housing and Services Coordinator~~ Planning Department

Funding Source: CDBG

Time Frame: Ongoing

Program 23

Review existing City ordinances and energy programs from other jurisdictions. Develop energy policies, if necessary. Insure that housing costs are not affected.

Responsible Agency: Planning Staff

Funding Source: City Funds

Time Frame: Ongoing

Program 24

Offer pre-sale code inspections on request.

Responsible Agency: Building Department Staff

Funding Source: Applicant Fees

Time Frame: Ongoing

~~Program 21~~

~~Continue the City's Energy Commission's activities.~~

~~Responsible Agency: City Manager~~

~~Funding Source: City Funds~~

~~Time Frame: Ongoing~~

Program 25

Investigate and pursue other federal, state, and county funded programs available for expansion of Rehabilitation activities.

Responsible Agency: Planning Staff, ~~Housing and Services Coordinator~~

Funding Source: Staff Time, CDBG

Time Frame: Ongoing

PROMOTE HOUSING ACCESSIBILITY

Goal C: Establish a community in which all people, regardless of their ethnic, racial, religious background, income, marital status, sex, age, or physical handicap have an equal opportunity to obtain housing. Promote the equitable solution of social and technical problems concerning property owners and residents.

Policies

Policy 3-63

Support efforts of organizations which are working towards eliminating discrimination in the Cupertino area.

Policy 3-64

Refer landlord/tenant complaints to a voluntary mediation board established by the City and operated by ~~Operation~~ Project Sentinel.

Programs

Program 26

Refer individuals experiencing housing discrimination to the Midpeninsula Citizens for Fair Housing or other such organizations.

Responsible Agency: Planning Department

Funding Source: Staff Time

Time Frame: Ongoing

Program 27

Refer landlord/tenant complaints to a mediation board established by the City and operated by ~~Operation~~ Project Sentinel.

Responsible Agency: Planning Department

Funding Source: Staff Time

Time Frame: Ongoing

Program 28

Continue to support fair housing services through the Santa Clara County CDBG Program.

Responsible Agency: Santa Clara County

Funding Source: CDBG (County)

Time Frame: Ongoing

EVALUATION OF 1985 HOUSING ELEMENT

[THIS SECTION WILL BE UPDATED AT A LATER DATE]

Government Code Section 65588 requires that the housing element evaluate:

1. The appropriateness of the goals, objectives and policies in contributing to the state housing goal;
2. The effectiveness of the housing element in attainment of Cupertino's housing goals and objectives; and
3. The progress of the city in implementation of the 1985 Housing Element.

Below are each of the housing goals and programs from the 1985 Housing Element followed by a discussion of actions taken since 1985 to implement each program. The programs are listed in the same order as they appear in the 1985 Housing Element.

Expand Housing Supply

Program 1. Provide information regarding rezoning of commercial and industrial lands to residential for owners of these lands.

Discussion: Since there are very few remaining large vacant commercial sites in Cupertino, the City has limited opportunities to encourage rezoning of commercial and industrial lands to residential use. However, several sites are suitable for mixed use projects because they are located in established commercial areas (refer to Program 8 below). Although opportunities are limited, the program should be retained to allow for the possibility. The program could be strengthened by identifying commercial and industrial lands appropriate to allow residential uses.

Program 2. Work with county, state, federal and private agencies active in developing affordable housing. Use HUD funds to finance infrastructure improvements.

Discussion: The City continues to work with county, state, federal and private agencies in developing affordable housing. During the past two years, the City has consolidated its housing programs under one full time housing coordinator and has approved an expanded housing work program which includes a new full time housing specialist (in addition to the housing coordinator). City staff has been encouraging non-profit agencies to apply for funds to develop affordable housing projects in Cupertino. During the past five years, four projects were implemented in the City, which involved converting existing market rate units to 20 affordable rental units. Below is a summary of each project.

Developer/Funding	No. of Units	No. of Residents	Project
Adults Toward Independent Living	Group Home	7	Rehabilitation of a Group home (CDBG) for physically handicapped adults
Spark Foundation (CDBG and City Below Market Rate In-Lieu Fund)	Group Home	6	Acquisition of a group home for developmentally disabled autistic adolescents
Community Housing Developers (City Below Market Rate In-Lieu Fund)	8	16	Acquisition of two four-plexes for very low income seniors
Chateau Cupertino (City's Seniors and Handicapped Housing Fund and private funding)	10	10	Designation of low income senior apartment units
Total	20	39	

In addition to the above projects, there are plans approved for 4 to 10 units of affordable senior apartments at the True Value Hardware site in Monta Vista and five additional group homes are in various stages of the planning process. Funding has been obtained for three group homes in Cupertino which will be sponsored by Innovative Housing. Funding for one of the group homes was approved through the City's Community Development Block Grant (CDBG) program. It involves leasing a house in Cupertino to provide housing for three to four low and moderate income single parent families (a total of six to eight persons). The other two homes, also for single parent families, sponsored by Innovative Housing received funding approval from the County's competitive CDBG program.

The City Council also approved development of two group homes by Housing for Independent People. One of the homes will be managed by Project Match to provide housing for five or six low-income senior citizens. The other home will be managed by the Homes For Independent Living (HIL) Foundation to provide housing for six developmentally disabled adults.

City staff meets regularly with representatives from other cities and the County to access funds for affordable housing projects, and has met with several non-profit and for-profit developers as well. Non-profit developers are likely to apply directly for federal funds for projects in Cupertino.

Federal funds (\$220,000) were used for street improvements in Monta Vista, an area targeted for housing rehabilitation and code enforcement activities. Because of dwindling federal funds, it is unlikely that infrastructure improvements will be funded except for specific sites where affordable housing is planned.

Program 3. Construct 80 - 130 units of assisted family and elderly rental housing using federal or state subsidies if available. Develop family and elderly units in proportion to the needs identified.

Discussion: Two affordable housing projects serving seniors were funded by the City. These two projects serve 26 people in 18 units:

Community Housing Developers
Acquisition of two four-plexes
16 seniors

Chateau Cupertino
Designation of 10 affordable apartments
10 seniors

Other affordable senior housing units have been approved by the City, as discussed in Program 2.

No new assisted family units were developed because of lack of federal subsidies and the high cost of land in Cupertino, and limited City staff time devoted to housing. As a result, housing policy was more reactive than proactive, with units being developed in response to annual requests for proposals for Community Development Block Grant (CDBG) funds, averaging approximately \$150,000 per year. In addition, the City Council emphasized housing for seniors and disabled persons, which was the thrust of the request for proposals in 1987 for the Seniors and Handicapped Housing Fund.

During the past two years the City has consolidated the housing duties under a full-time ~~Housing and Services Coordinator~~ and has recently hired a full-time ~~Housing Specialist~~ Planner II to assist in the development and implementation of the City's housing program. A more proactive approach has been possible ~~as a result~~. ~~The housing coordinator has been~~ Planner II is responsible for meeting with local developers and other individuals to encourage development of additional housing units and participated with the Council of Churches who sponsored a workshop for Cupertino churches to explore developing affordable housing on church land.

As commercial or industrial developments are planned, City Community Development Department staff have been encouraging housing units as part of mixed use developments and will continue to do so in the future.

Some assisted family units could result from some of these projects if pursued by the developer and approved by the City Council.

Program 4. Continue participation in Section 8 (Existing) to assist 20 very low and low income families and elderly households.

Discussion: The Santa Clara County Housing Authority administers the HUD Section 8 Program in Cupertino. The Section 8 program pays the difference between the rent an individual can afford to pay and the actual rent of the unit they occupy.

There are currently (February 9, 1990) 55 Section 8 certificates and 8 Section eight vouchers issued to Cupertino residents. There are 95 Cupertino families on the waiting list for the Section 8 program.

The majority of federally subsidized units in Cupertino are located in the Sunny View West Home which contains 100 HUD-subsidized rental housing units for elderly and disabled residents. It is located at Foothill Boulevard and Cupertino Road. The 63 Section 8 units are scattered throughout the City.

A problem in the past has been that Fair Market Rents paid through the Section 8 program were not high enough to be attractive to landlords. Currently Section 8 rents are more competitive and this program might be strengthened in Cupertino through a workshop for landlords.

Program 5. Develop rental and affordable ownership housing opportunities through the following combination of programs:

- Continue priority processing of developments that have low and moderate income units;
- Identify the most suitable sites as shown in Figure 3-M and determine the availability of surplus school sites;
- Excuse a portion of, or all development fees of projects that include low and moderate income units, if there would be no effect on the health, safety and welfare of the community by this action.
- Apply for state predevelopment loans, if available, to write down predevelopment costs and use Mortgage Revenue Bonds to finance rental construction.
- Adopt a method, during 1986, to implement density bonus increases according to Section 65915 of the Government Code;
- Use City funds to assist a non-profit organization to develop rental units for low and very low income households. Several funding sources are currently being considered, including the general fund, an augmented construction tax, in-lieu below-market rate Below Market Rate (BMR) in-lieu fees, and/or a hotel occupancy tax. A final decision of funding sources will be delayed due to an initiative on the November 1986 ballot which would restrict the City's ability to augment the construction tax. After a funding source is established, the City will issue a Request For Proposals to appropriate non-profit organizations. The City's intent is to transfer the allocated funds to a non-profit organization which would be responsible for designing, implementing, and managing the housing.

Discussion: Priority processing - The Planning Department continues to give priority to processing projects which include low and moderate income units. Cupertino's application schedule is designed to expedite the hearing process. The time period between submitting an application and appearing before the Planning Commission is only one and one-half months. This is the minimum time needed for environmental review, legal noticing, and architectural review, if required. This program is effective and should be continued at its present level.

Identify sites - The City prepared a list and map of 91 sites with residential development potential (refer to Appendix B). The effectiveness of the list and map identifying housing sites could be strengthened by adding sites appropriate for higher density and mixed use housing. The Housing Subcommittee of the Goals Committee identified specific sites they recommend as appropriate for higher density and mixed use housing.

Waive development fees - In the past, development fees were waived for projects which either provided BMR units or in lieu fees. Since the BMR program was dropped, City staff has considered and investigated several new programs to provide incentives for encouraging affordable housing, including a fee waiver system. A specific program will be designed as a product of the General Plan review which is expected to conclude in 1991.

Apply for pre-development loans and use Mortgage Revenue Bonds - The City has not requested State predevelopment loan funding because that would be the responsibility of a non-profit housing developer. Mortgage Revenue Bonds have not been implemented because interest rates have not been competitive with market rate loans. The use of Mortgage Revenue bonds has possibilities for the future; information is being gathered from bankers and developers for possible implementation. Bonds could be issued by the City, with the collateral being the property which contains the affordable housing units and the banks agreeing to purchase the bonds. Such a private placement of bonds would serve to reduce the brokerage fees and other fees related to the cost of bond issuance, thereby reducing the interest rate for the developer of affordable housing.

The City has entered into cooperative agreements with the County for the issuance of Mortgage Credit Certificates (MCC's). Since 1985, a total of 25 MCC's have been issued in Cupertino. However, the quantified objective for bonds was overstated in the 1985 Housing Element.

Through the use of an MCC, eligible first-time home buyers increase their eligibility to qualify for a mortgage loan and reduce their effective mortgage interest rate approximately 2 percentage points. MCC recipients may take 20% of their annual mortgage interest payments as a dollar for dollar tax credit against their federal income taxes. The home buyer adjusts federal income tax withholdings, increasing income available to pay for the mortgage. As home prices increase in Cupertino they will exceed the limits of the MCC program and fewer certificates will be issued. Therefore, additional programs will be needed to serve this need.

Density bonuses - The City has not adopted a density bonus ordinance. As required by Government Code Section 65915, the City will adopt an ordinance implementing density bonuses in 1991.

Use of City funds - In 1986 the City created the Seniors and Handicapped Housing Fund for the purpose of promoting the development of affordable housing for seniors and disabled persons. The initial source of funding was in-lieu fees from the City's former Below-Market Rate (BMR) Program. The City has also made allocations of CDBG funds to the Seniors and Handicapped Housing Fund over the past three years.

In 1987 the housing fund provided loans totaling \$510,000 to two non-profit agencies to develop affordable housing for seniors and disabled persons. The sources of income for the fund at present are rent from a City-owned condominium, interest from a Spark Foundation loan, investment interest and annual CDBG allocations.

In 1989, the City approved policies by which agencies would be encouraged to leverage City funds with other sources of funds, so that more people could be served with the limited funds available, and to give smaller loans for housing projects with loan payback terms that will allow the building of a revolving loan fund for housing. A committee was established to review proposals for affordable housing projects to be funded from the Seniors and Handicapped Housing Fund. The committee is attempting to finance a greater variety of projects and to use the fund to leverage other sources of financing. This program has been effective in generating and applying funding. Current programs may deplete existing funding, so additional sources of funding should be investigated.

Program 6. Determine the necessity of an Article 34 Referendum.

Discussion: Article 34 of the California Constitution requires a positive vote of the electorate in order to allow the construction of low cost publicly owned, developed, or financed housing. The need for an Article 34 referendum is determined on a case by case basis. The City could consider holding an Article 34 election to cover the maximum number of affordable housing units expected to be developed over a multi-year period.

Program 7. Participate in Mortgage Revenue Bond programs through the county. Provide ownership housing for 20 moderate income households and rental units for 60 low income households and 120 moderate income households over the time frame of the element.

Discussion: As discussed above under Program 5, the City has entered into a cooperative agreement with the County for the issuance of MCC's. Mortgage revenue bonds have not been implemented because the interest rates have not been competitive with market rate loan. See Program 5 for discussion of future use of Mortgage Revenue Bonds.

Program 8. Encourage mixed use developments through the City's new land use policies. The City regulates non-residential development through the application of floor area ratios. Housing constructed in conjunction with non-residential development is excluded from the floor area ratio calculation. Therefore, a developer is not penalized for constructing housing and housing is encouraged in areas otherwise reserved for non-residential growth.

Discussion: The City continues to encourage mixed use projects which incorporate residential uses within commercial projects. The Planning Department has been discussing with developers the City's desire to add residential units as part of other mixed use sites and commercial developments. A number of mixed use projects have been developed during the past five years. In addition, the City recently approved a project by Sisk and Brown which includes a new building with retail and office uses on the first floor and 12 apartment units on the second and third floors. At least four of the units must be affordable for low income seniors. This is an effective program in creating new housing in areas not identified for housing. Identifying specific areas or criteria for specific areas for mixed use could be considered as a way of strengthening the program. Policies regarding parking and the ratio of retail/office development to housing should be considered.

Program 9. Review vacant lands for potential rezoning every three years, including rezoning non-residential land to residential uses and increasing the permitted intensity of residentially-zoned parcels.

Discussion: Since there are very few remaining large vacant commercial sites in Cupertino, the City has limited opportunities to encourage rezoning of commercial and industrial lands to residential use. However, several sites are suitable for mixed use projects because they are located in established commercial areas. For example, Town Center is a recently constructed mixed use project which has 158 townhouses and 373 apartments (including 169 senior apartments). The density of a small residential subdivision was increased in one case. This program has been implemented on a case-by-case basis, rather than every three years, and could be strengthened by implementing a regular review of potential areas for rezoning or increased densities.

Program 10. Continue Second Unit Ordinance. Approximately 100 units, predominantly for the elderly, can result from this action. Determine if alternate forms of financing would be available to assist in the construction of such housing.

Discussion: The 1985 Housing Element overstated the demand for second units. During the past five years, there have been only six requests for approval of second units. All six of the applications were approved. Due to the lack of requests for approval of second units, the quantified objective was not met. This program could be more effective and could be strengthened by promoting second units through public contact and publications. Allowing second units in zoning districts other than single family could be considered. Determining alternate forms of financing is not a likely activity.

Program 11. Continue to support Project Match with CDBG Funds. Assist 15 low income elderly households annually.

Discussion: The City has continued to support Project Match with CDBG funds. Project Match helps senior citizens who wish to share housing with housing seekers. Approximately 16 matches per year are made for Cupertino residents. For example, during FY 1988-89, 14 Cupertino residents were reported matched. During FY 1989-90, 14 Cupertino residents were matched. The City will evaluate the feasibility of continuing to contract with Project Match or to contract with another non-profit organization to provide matching services.

Program 12. Continue to use CDBG funds to reduce costs in supplying below market rate housing. The City has established a senior citizen housing fund with CDBG monies.

Discussion: The City is in its sixteenth year (1990-91) of receiving Community Development Block Grant (CDBG) funding. The city currently receives approximately \$142,000 of CDBG discretionary funds and \$15,000 of CDBG administrative funds each year. In addition, funds are also available at the County level for CDBG competitive funds.

HUD regulations require that projects selected for funding must benefit low and moderate income persons, eliminate a blighted area, or address an urgent (emergency) community need. In addition, only certain types of activities qualify, including property acquisition, public improvements, public services, affordable housing, housing rehabilitation, and removal of barriers to the handicapped.

As discussed above under Program 5, the City created the Seniors and Handicapped Housing Fund for the purpose of promoting the development of affordable housing for seniors and disabled persons. The initial source of funding was in-lieu fees from the City's former Below-Market Rate (BMR) Program. The City has also made allocations of CDBG funds to the Seniors and Handicapped Housing Fund over the past three years.

This program was evaluated in 1989 and changes made to provide smaller loans so that funds could be used for more projects and to encourage the agencies to seek other funding sources. Payments were required on the loans to help replenish the fund for the future. Because this program has been successful in working with non-profit agencies to develop affordable housing units, other funding sources for the fund should be developed. The City also is considering expanding the scope of the housing fund and its oversight committee to encompass all affordable housing projects, rather than limiting it to housing just for seniors and the disabled.

PRESERVE AND ENHANCE EXISTING HOUSING

Program 13. Conserve the existing BMR units and the 27 low income handicapped units. This will be accomplished by continuing to control the resale price of the existing BMR units and maintaining the rent of the handicapped units at rates affordable to low income persons.

Discussion: The Below Market Rate (BMR) Program was discontinued in 1986 in terms of creating new units. The City discontinued this aspect of the program because it was felt that the burden of the program should be distributed equally among office, commercial and residential developers.

At the time, only developers of high-density residential units were subject to BMR requirements. The City also wanted to target its affordable housing programs toward lower income persons and not the moderate income persons that were being served by the BMR Program. The total number of BMR units that were produced under the program was 14, and the current number of BMR units is 13. Over the years the City has continued to control the resale price of the BMR units.

The City is now considering exercising its option to purchase the 13 units as they are offered for sale by their current owners. The units would be either rented or sold to raise funds for the development of affordable housing. By leveraging the funds with other sources, the City can develop a greater number of affordable rental housing units so that more persons can be served (i.e., the intent is to provide more units of affordable housing than were provided under the BMR Program).

The 27 low income handicapped units are in the Le Beaulieu development which was completed in 1985 by Community Housing Developers, Inc., a non-profit developer. The project was financed by County and City CDBG grants, California Housing Finance Agency Bond financing and the HUD New Construction Program. This program could be more effective and is being changed.

Program 14. Continue code enforcement and maintenance of public areas.

Discussion: The City continues to have an active code enforcement program through the Planning Department and Building Department. In addition, three code enforcement officers work out of the City Manager's office. The program encourages the conservation of housing stock. The building department enforces the Uniform Building Code through regular inspections and investigation of complaints regarding code violations. The code enforcement officers enforce zoning and permit regulations which assure that residences are maintained according to code and approved plans. In 1989 code enforcement officers responded to 153 cases involving violations in these areas. This program is effective in conserving housing stock and should be continued.

Program 15. Provide low interest rate loans or grants to 5-10 very low and low income households per year to correct building code violations and housing deficiencies per the City's Rehabilitation Guidelines. The program is targeted at owner-occupied units. If sufficient funds are available, loans will be made to rehabilitate rental units.

Discussion: Since 1976 the City has been offering low-interest loans to residents of low and moderate income to repair/rehabilitate their homes. In October 1988, the City approved changes in loan terms to bring in a greater amount of income from new rehabilitation loans by requiring payments that are affordable based upon the loan recipients' incomes. The loan committee has reserved the option of reducing the interest rate or amount of the payments in hardship cases. Although most loans have been provided in the Rancho Rinconada area, outreach efforts were expanded to the incorporated areas of the City after the earthquake on October 17, 1989.

Since these changes were made, there has been a steady increase in the amount of income generated from loan payments. For example, in October 1988 income from loan payments was approximately \$11,000 per year. By July 1990 loan payment income increased to \$30,000. At this rate the program can eventually bring in enough income to be self-perpetuating, without additional CDBG funds.

During the past five years, a total of 35 rehabilitation loans were issued for owner-occupied homes. The outstanding loan portfolio contains 34 payment bearing loans and 18 deferred loans, with a total outstanding loan balance of approximately \$800,000. Because of the large number of loan pay-offs in recent years and the increased program income from loan payments, the program currently has \$200,000 available for new loans. The City did not provide funds to rehabilitate rental units. This is an effective program and should be continued.

Program 16. Continue the Condominium Conversion Ordinance to preserve the existing supply of affordable rentals.

Discussion: The City's Condominium Conversion Ordinance remains in effect. During the past five years, no apartment units have been converted to condominiums. This program is effective in conserving rental units and should be continued.

Program 17. Provide information on loan programs and fix-up techniques through the Rehabilitation Program.

Discussion: The City does considerable promotion of the rehabilitation program. The program is promoted through the distribution of flyers, door-to-door canvassing and the City newsletter. A full-time housing specialist was hired in 1990 which will improve the City's ability to promote and service this program. Providing information on fix-up techniques is being de-emphasized because the homeowner can get this information from other resources.

Program 18. Review existing City ordinances and energy programs from other jurisdictions. Develop energy policies, if necessary. Insure that housing costs are not affected.

Discussion: The General Plan provides information on conserving energy in home construction. The Energy Commission reviewed programs from other jurisdictions to explore additional possibilities. As a result a new ordinance was enacted which requires that residential units located in the R1 and R3 zoning districts must have both gas and electric sources available for clothes dryers. This program is effective in reducing home maintenance costs and the Commission should continue consideration of new policies which would promote energy conservation.

Program 19. Determine the need for pre-sale code inspections.

Discussion: The City currently receives and responds to approximately 12 requests per year for pre-sale code inspections, which are paid for by the property owner. If construction occurred without a building permit, the property owner is either required to dismantle the construction if needed or provide an engineer's letter to verify that it was built to code. Regular building permit fees are charged. This is an effective program in assuring that homes are maintained and it should be continued.

Program 20. Continue the City's Energy Commission's activities.

Discussion: The City's Energy Commission was active during the past five year period. The Commission met on a monthly basis. Some of their activities were: Promoted awareness of residential energy conservation opportunities such as PG&E energy audits and rebates and energy efficient furnaces through publication of "Energy Hints" in the monthly City publication mailed to all residences; produced a video on hot water heater blankets shown on Cupertino's cable channel; appeared at local service clubs and civic fairs to provide information on energy conservation in the home; and published a brochure for builders which provided easy understanding of passive solar construction standards. This is an effective program in providing information to reduce homeowner costs and should be continued.

Program 21. Investigate and pursue other federal, state, and county funded programs available for expansion of Rehabilitation activities.

Discussion: City staff has attended workshops regarding other federal, state and county funded programs available for expansion of the rehabilitation activities. Primarily because many of the other programs are directed toward declining neighborhoods, the City has been unable to identify any additional funding sources for the rehabilitation program. Since the earthquake in October 1989, the Santa Clara County sponsors rehabilitation loans through the California Disaster Assistance Program (CALDAP) and Cupertino residents are referred to this program. The City also refers residents to the County for the 312 Rehabilitation Loan Program and other programs that may be developed.

PROMOTE HOUSING ACCESSIBILITY

Program 22. Refer individuals experiencing discrimination to the Midpeninsula Citizens for Fair Housing or other such organizations.

Discussion: The City has used the services of the Midpeninsula Citizens for Fair Housing (MCFH) for several years. The organization provides counseling and follow-up investigation to victims of housing discrimination. During a one year period (July 1, 1988 through June 30, 1989), the organization received 30 complaints and worked on 11 cases involving Cupertino residents. Over the past two years, the number of cases investigated was considerably less than what MCFH had projected, although the money requested remained the same. Although they reported additional outreach efforts the number of complaints and cases continued to decline. Although the City provided funding for the program for two years through the City CDBG program, the program is currently funded as part of a fair housing consortium through the Santa Clara County CDBG program and their service level will need to be addressed by the County.

Program 23. Refer landlord/tenant complaints to a mediation board established by the City and operated by Operation Sentinel.

Discussion: The City provides a \$19,600 grant from the general fund for services to tenants and landlords including counseling about their rights and obligations, dispute resolution through mediation and information and referral. From October 1, 1989 through September 30, 1990 Operation Sentinel received 750 calls which resulted in 81 cases, 27 conciliation's, and 7 mediations. Program effectiveness is evaluated annually.

Program 24. Continue to support the Midpeninsula Citizens for Fair Housing through the counties CDBG program.

Discussion: Midpeninsula Citizens for Fair Housing (MCFH) investigates cases of discrimination against persons seeking housing. MCFH provided this service for Cupertino residents between 1985 - 1990. The County funded the program through County CDBG funds during the first three years of this period, and the City funded them directly through an annual grant of \$10,000 in Fiscal Years 1988-89 and 1989-90. During this two year period, MCFH responded to 39 complaints and investigated 18 cases from Cupertino residents. Since other fair housing agencies are funded by County CDBG funds, rather than City CDBG funds, future funding for MCFH will be from the County rather than Cupertino.

CONCLUSION

The 1985 Housing Element projected construction of a total of 2,270 housing units between 1985 and 1990. The total new construction need identified by the Association of Bay Area Governments for the period 1985 - 1990 was 2,304 units.

Between January 1985 and January 1990, a total of 1,112 units were constructed, including 899 single family homes (both attached and detached) and 213 multi-family units (State Department of Finance, 1986 and 1990). During this same period, a total of 28 units were annexed and 50 units were demolished (Planning Department, 1990). Thus, the housing stock increased by a total 1,090 units between 1985 and 1990 which includes 877 single family units and 213 multi-family units. The additional housing units between 1985 and 1990 represent approximately 48% of the projected number of units and 47% of the new construction need.

The actual number of units produced compared to the City's new construction need from 1985-1990 is shown below.

	1985-90 Construction Need	New Units Added	Group Homes	Shared Units	MCC's	Second Units	Total Units (85-90)	Unmet Need
Very Low	488		20	45			65	423
Low	427			18			18	409
Moderate	542			17	25	6	48	494
Above Mod.	847	1,090					1,090	-243
Total	2,304	1,090	20	80	25	6	1,221	1,083

The City has met its objective for housing rehabilitation. The 1985 Housing Element included a quantified objective to rehabilitate 25 - 50 low income owner-occupied units. During the past five years, 35 loans were issued by the City for rehabilitation of owner-occupied homes.

The goals and policies in the 1985 Housing Element continue to be appropriate for attainment of the state housing goal. However, the disproportionately higher rents in Cupertino and the lack of adequate federal subsidies have resulted in the need for affordable housing far exceeding the supply. Reduced federal subsidies and the lack of other sources of revenue for housing have hampered efforts in meeting the City's share of regional housing need.

CONSISTENCY WITH OTHER GENERAL PLAN ELEMENTS

Government Section 65300.5 requires that the general plan and its elements comprise an integrated, internally consistent and compatible statement of policies of the City. The other elements of the General Plan are being revised in conjunction with the preparation of the revised Housing element. In particular, revisions will be required to the Land Use Element.

DESCRIPTION OF PUBLIC PARTICIPATION EFFORTS

The Citizen Goals Committee was instituted by the City Council to provide community input in updating the General Plan. The committee has been meeting on a weekly basis since May 5, 1990 in order to identify goals for the community and develop strategies and tactics to support the goals. It has 90 members which represent all segments of the community, including local businesses and neighborhood organizations.

As a result, the City received a substantial amount of input for the revised housing element. The goals which have been developed include the following:

- promote affordable housing;
- promote mixed use opportunities;
- maintain neighborhood quality;
- encourage jobs/housing balance;
- target housing for Cupertino residents and workers.

Notices of the meetings were advertised in the local newspaper and sent to 75 interested individuals and organizations which are on a mailing list. Members of the public were given an opportunity to speak at each of the meetings.

An on-going dialogue among developers, the community and the City should be fostered to encourage opportunities for and understanding of affordable housing proposals. This could be accomplished by holding workshops prior to public hearings where these interests can discuss the project in a less structured setting. Developers should be encouraged to meet with neighborhood groups prior to development design to learn their concerns.

APPENDIX A: REFERENCES

POPULATION AND HOUSING PROFILE

Association of Bay Area Governments (ABAG) Housing Needs Determinations, January, 1989.

Association of Bay Area Governments (ABAG), Projections 90, December 1989.

Brennan, Sally, Cupertino Community Services, telephone communication, June 22, 1990.

California Coalition of Rural Housing Project, Inventory of Federally Subsidized Low - Income Rental Units at Risk of Conversion, March 1, 1989.

City of Cupertino, Planning Department, Survey of Apartment Complexes In Cupertino, January, 1990.

Collard, Consuelo, Santa Clara County Housing Authority, telephone communication, June 15, 1990.

Council on Aging of Santa Clara County, Inc., Coming of Age: A Profile of the Older Population of Santa Clara County, May 1989.

Lawrence, Beverly, Midpeninsula Citizens for Fair Housing, telephone communication, July 13, 1990.

Santa Clara County Advanced Planning Office, Projected Population By Race/Ethnicity Santa Clara County: 1980 - 2010, July 1988.

Santa Clara County Homeless Overview Study Task Force and Homeless Overview Technical Committee, Homelessness in Santa Clara County 1989, November 1989.

Sedway and Associates, Memorandum Regarding Cupertino Economic Overview Study, June 20, 1990.

State Department of Housing and Community Development, Division of Housing Policy Development, Memorandum Regarding New Income Limits, March 21, 1990.

State Department of Finance, Demographic Research Unit, Santa Clara County Population and Housing Estimates, January 1, 1990.

HOUSING NEEDS

Association of Bay Area Governments (ABAG) Housing Needs Determinations, January, 1989.

City of Cupertino, Housing Assistance Plan, 1988-91.

City of Cupertino, Planning Department, Survey of Apartment Complexes in Cupertino, January, 1990.

San Jose Real Estate Board, May, 1990.

ADEQUATE SITES INVENTORY

City of Cupertino Planning Department, Sites for Housing Development Map and Description of Sites for Housing Development, July, 1990.

State Department of Finance, Demographic Research Unit, Santa Clara County, Population and Housing Estimates, January 1, 1990.

CONSTRAINTS TO THE DEVELOPMENT OF HOUSING

Bank of America, Bay Area Construction Cost Survey, 1987.

Bay Area Council, Taxing the American Dream: Development Fees and Housing Affordability in the Bay Area.

Sisk, Jim, telephone communication of July 16, 1990.

EVALUATION OF 1985 HOUSING ELEMENT

City of Cupertino, City Council Staff Report, February 21, 1989.

City of Cupertino, City Council Staff Report, February 20, 1990.

Collard, Consuelo, Santa Clara County Housing Authority, telephone communication on June 15, 1990.

Cowan, Bob, Director of Community Development, City of Cupertino, conversation on June 13, 1990.

June, Arlyne, Project Match, telephone communication on June 26, 1990.

Norling, Marilyn, J., Housing and Services Coordinator, City of Cupertino, conversation on June 6, 1990.

State of California Department of Finance, Population Research Unit, Summary Report - Population and Housing Units - Santa Clara County, January, 1985 and January, 1990.

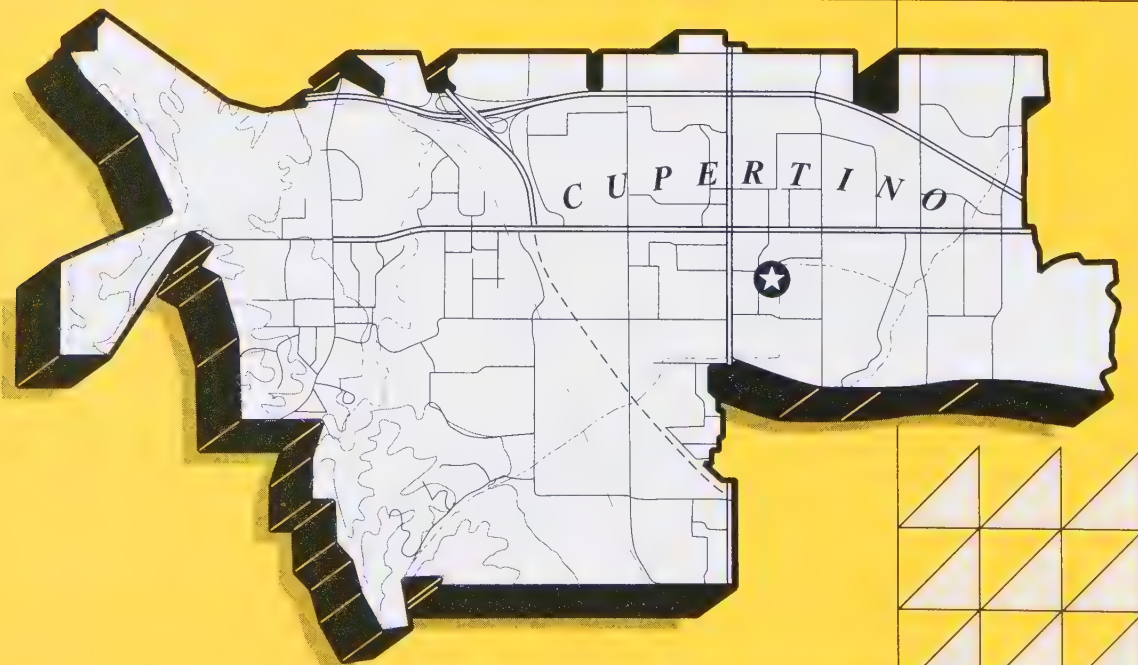
Wordell, Ciddy, Associate Planner, City of Cupertino - conversation on June 13, 1990.

APPENDIX B: SITES FOR HOUSING DEVELOPMENT MAP

APPENDIX C: DESCRIPTION OF SITES FOR HOUSING DEVELOPMENT

NOTE TO APPENDIX C

~~The number of projected housing units consists of units specifically allowed by the existing General Plan. It does not reflect additional units that are possible through other programs. Program 8 allows mixed use developments without penalty to permitted floor area ratios, and Strategy 3 under Policy 2-24 allows residential developments to exceed planned density maximums if they meet a special community social goal. Therefore, areas do not need to be specifically rezoned to allow greater density, specifically density that might be required for multi-family housing opportunities. The number of potential units has not been determined since these are not site specific programs; however, studies could be undertaken to determine the appropriateness and capacity of specific areas for mixed use and higher density residential development.~~



Circulation



INSTITUTE OF GOVERNMENTAL
STUDIES LIBRARY

FEB 26 1977

UNIVERSITY OF CALIFORNIA

4

Introduction

People travel in Cupertino by a wide range of methods, from driving on the freeway to taking a bus or a car on a street to walking along a hiking trail. This element's purpose is to integrate the travelways and the transit service into a single system that fits in with the ways in which Cupertino residents have chosen to live.

Circulation Goal

The goal is to promote a balanced circulation system that is integrated with the regional system, offering flexibility for the future by allowing for a variety of forms of transportation and keeping negative environmental and social effects on the community to a minimum.

This requires a commitment of political will to achieve intergovernmental cooperation and economic resources to fund transportation.

The Regional Perspective

Cupertino does not plan its circulation system in a vacuum; it participates in regional and sub-regional planning and supports the Santa Clara Valley Transit District bus system by installing new bus improvements. County Congestion Management Agency, Measure A Task Force (Local Transportation Authority), and the Santa Clara County Transportation Plan (T2010) The City requires bus turn-outs to be built at key intersections and makes sure that new development encourages bus patrons to walk home from the bus stop. A new bus transfer station will be built in Vallco Park when new development in the neighborhood warrants it.

Regional transportation planning efforts involve land use. The jobs-housing imbalance in northern Santa Clara County makes the transportation picture worse. Increasing the housing opportunity next to areas with employment growth is a policy advocated by the Association of Bay Area Governments, the Bay Area Council, other public interest groups, and the Santa Clara County Board of Supervisors.

Cupertino responded to this challenge in 1978-1979 by significantly increasing allowed density ranges. Despite density increases that theoretically would have increased the future housing supply by 1100 dwellings, The effort was augmented by changes to land use and housing policy in 1992 which reallocated potential commercial development to less traffic intensive office development and increased the potential number of housing units. The 1992 policy changes increased the potential housing unit yield by approximately 1000 units. Despite density increases that theoretically would have increased the future housing supply, Cupertino may not be able to balance new jobs with new housing. It would have to rezone the majority of industrial parcels located in built-up industrial areas to high-density residential to achieve this balance. This is not practical because most of that land is planned for the expansion of existing firms and most of the remaining parcels are too small for housing. Cupertino encourages mixed-use development to increase housing supply. There is a policy later in this element that shows a way to create new housing in commercial, office, and industrial areas without the loss of development credits for the primary, non-residential, use.

Policy 4-1: City Participation in Regional Transportation

Participate actively in developing regional approaches to meeting the transportation needs of residents of the Santa Clara Valley.

Strategies

1. **Highway 85 Corridor Right-of-Way.** Completely protect and construct the Highway 85 corridor right-of-way and participate in a regional effort to find the most mutually agreeable and appropriate transportation facility to be placed in the corridor. If a regional effort is not successful, independently pursue the construction of a transportation facility within the Cupertino segment of the full right-of-way, that in the City's sole judgment is appropriate in using available resources.

Strategies:

1. Continue to actively participate in the Congestion Management Plan and other regional efforts to control traffic congestion and its attendant air pollution impacts by:
 - a. requiring a separate traffic analysis using Congestion Management Agency (CMA) methodology for projects that generate a large amount of peak hour traffic.
 - b. preparing a deficiency plan as defined by CMA if the regional transportation system is seriously congested.
2. **Expansion of Bus Fleet.** Support the expansion of the County Transit District bus fleet to 750 vehicles, and support prioritizing commuter express services along expressways and City arterial streets.
3. Extension of rapid transit. Support the extension of rapid transit along North De Anza Boulevard/ Highway 85 Corridor and Stevens Creek Boulevard Corridor by the following means:
 - a. All right-of-way improvement projects shall be reviewed for potential opportunities and constraints to rapid transit extension in these corridors.
 - b. Focus higher development intensities along the corridors and orient the design of such developments to serve future transit patrons and pedestrians.
 - c. Seek the cooperative support of residents, property owners and businesses in planning for a rapid transit extension.

The Local Perspective

Cupertino's land use and circulation plans control the intensity of land use based on the capacity of the street network to carry traffic, incorporating measures that protect residential areas from through traffic.

The term "traffic carrying capacity" is subjective. Its definition is based on the desired maximum road width and number of travel lanes and the "level of service." Except for intersections, the City limits the number of travel lanes in each direction to four. This limit is based on future widening possibilities and a judgment that wide streets are unattractive and divide Cupertino. Figure 4-B shows the adopted roadway system.

"Level of service" refers to a system that measures the degree of traffic congestion. It ranges from Level A-free flow, to Level F-failure. Table 4-A explains these levels. Level A is ideal, but it is not feasible to maintain that level in an intersection if surrounding intersections are more congested. Drivers looking for the fastest way to their destination will go to the less congested intersection and equalize the congestion for the whole system. Like most Cities located in the urbanized areas of Santa Clara County, Cupertino adopted Level of Service (LOS) D for the purpose of planning its street system to accomodate growth. The general plan land use and transportation elements are linked to ensure that existing and future land use activities are regulated in a manner to ensure that existing and future street system is maintained at a minimum LOS D. The intersection of Stevens Creek Boulevard and DeAnza Boulevards is exempted from the LOS D standard.in order to facilitate the "Heart of the City" concept described in the Land Use/Community Character Element.

Table 4-A. Traffic Service Levels.

Level of Service	Technical Definition	Short Definition
A	Free Flow (Relative)	Good, no congestion
B	Stable Flow (Slight Delay)	Some congestion
C	Stable Flow (Acceptable Delay)	Congestion
D	Approaching Unstable Flow (Tolerable Delay)	High congestion
E	Unstable Flow (High Delay)	Near breakdown
F	Forced Flow (Jammed)	Breakdown

Policy 4-2: Traffic Capacity and Land Use Limitations

Strive to maintain a reasonable minimum level of service-traffic movement, especially during the peal D for major intersections during the p.m. peak traffic hour (highest single hour) between 5 and 6 PM, by imposing reasonable limits on land use to ensure that principal thoroughfares are not unduly impacted by locally generated traffic during the peak traffic hour.

In order to accomodate development which furthers a unique community gathering place on Stevens Creek Blvd, the intersectionosf Stevens Creek and DeAnza Boulevards may maintain a LOS E (No more than 45 seconds weighted delay).

For land use and transportation planning purposes, the traffic peak hour should not be allowed to expand into the peak period. Staggering of work hours beyond current levels is not acceptable as a transportation demand management (TDM) technique. The TDM technique must benefit both the peak hour traffic and the average daily traffic volume.

Strategies

1. **Right-of-Way Limitation.** In order to minimuze the barrier effect of major boulevards and the negative aesthetics, limit mid block right-of-way capacity to a maximum of eight lanes for De Anza Blvd. and six lanes for Stevens Creek Boulevard. through carrying out the constraint of 16 trips that end at the property per acre on development in the Core Area.

2. **Development/Floor Area Ratio Limitation.** ~~Impose a~~ In order to maintain a desired level of transportation system capacity, the city's remaining commercial development potential shall be pooled and reallocated according to the City's development priorities tables. Floor Area Ratio (FAR) limitations apply to all on remaining commercial, office, and industrial properties unless a property owner received bonus FAR credit authorized by the 1983 General Plan and/or a higher development allocation, above the FAR limitation, is approved by the City. The properties previously regulated by the trip end performance standard will be regulated by a floor area ratio specified in the Land Use Element.

Businesses which generate traffic levels which are significantly higher than businesses typically found in a similar zoning district will be subject to the "Extraordinary Use Policy" contained in the Development Intensity Manual.

3. **Citywide Transportation Improvement Plan.** Carry out a citywide transportation improvement plan to accommodate peak hour traffic flows on arterial streets and major collector streets at a minimum of Service Level D. Service Level E is acceptable only for the intersection of De Anza and Stevens Creek Boulevards to implement the Heart of the City Concept. If feasible, the plan should maintain existing levels of service higher than Level D. The percent or number of through trips on arterial and major collector streets is not regulated.
4. **Underpass at De Anza and Stevens Creek Boulevards.** The City should consider an underpass at De Anza and Stevens Creek Boulevard to improve traffic flow if needed to implement significant, new growth.
5. **Traffic Assessment after Highway 85 Completion.** After the completion of Highway 85, the City should conduct a traffic analysis of the street system to determine opportunities to improve the Level of Service.

Cupertino uses a traffic model that assigns future commute, work, shopping, and non-shopping trips to find how much new development can occur without exceeding the roadway limits imposed by Level D and road width criteria. The county traffic model included future build-out levels in surrounding communities based on their general plans. It also includes significant future road improvements such as the Interstate 280 widening project but ~~does not include~~ including pending improvements in the Highway 85 corridor. Measure A improvements are included in the model, but most of the counties T2010 improvements are not. The model converts surplus roadway capacity to land use capacity. The land use capacity is expressed in terms of available peak hour trips which in turn can be converted into future building space of various types of land use categories.

~~The amount of allocated space is based upon the traffic generation rate. The higher the traffic generation rate, the less building area allowed. For example, an office building generates less traffic than an equally sized retail establishment. An allocation of 10 trips to a site may result in a 10,000 sq. ft. office building or a 5,000 sq. ft. retail building or a 3,000 sq. ft. restaurant.~~

The land use plan allocates available development credits and establishes land use intensity controls in the form of ~~Traffic Intensity Performance credits and establishes~~ Floor Area Ratios for each area of Cupertino. Excess development credits are allocated to the Vallco Park and Town Center planning areas. This mechanism is fully explained in the Land Use/Community Character Element.

Each time a new development application is reviewed, the level of service and maximum lane width criteria are considered so that the traffic carrying capacity of the road remains in line with new development.

Tiered Mitigation

The growth limit defined by the traffic model limits commercial, office and industrial growth to approximately 2,900,000 square feet above development built and occupied during the 1990 base year for the model. The land use element of the plan describes the permitted land use in detail. The City's General Plan permits additional growth to occur based upon compliance with specific performance standards including the LOS D criterion. Assuming other performance standards are met, development levels above the FAR limitations up to a 2,000,000 square foot cap for office and industrial can be achieved if qualified employers/developments can reduce traffic generation for the additional growth to a level which is equal to or below the amount of traffic that would have been created had the property been developed at a level allowed by the maximum base land use intensity levels permitted by FAR's and transferred development credits. This program is defined as the "Three Tiered Mitigation Program". This program can be utilized by qualified major employers to construct building area above normally allowed maximum building area. The maximum additional square footage may not exceed 2,000,000 square feet. The Tier 1 reductions can be automatically applied since said traffic reduction techniques are viable and sanctions are created to ensure that said mitigation programs continue to be adhered to following construction. Tier 1 and 2 description and procedures are generally described on figure 4-C. The City's "Development Intensity Manual" will be amended to describe detailed procedures regarding the implementation of the Tiered Mitigation Plan.

Policy 4-4 : Coordination of Street Improvements

Develop the street construction plan that makes sure that critical street improvements are finished before or at the same time as major developments. The plan should be based on the principle of equity, ensuring that land developers help pay for street improvements.

Strategy

1. **Traffic Evaluations With New Development.** Require a traffic evaluation when the final development plans for any major development are filed.

The five-year Capital Improvements Program outlines improvements for the entire network. The timing of improvements will be adjusted depending on land development projects.

Description of the Circulation Plan

Figure 4-B describes Cupertino's Circulation Plan for City streets except for residential streets, which are not shown. It locates the freeways, expressways, arterials, and major and minor collectors. Table 4-B defines the function of each street type and its typical lane design.

The street hierarchy is designed to concentrate traffic on freeways and arterials that serve commercial and industrial areas and to shift traffic away from residential areas to the network of freeways and arterials. The plan is put into effect in stages by the five-year Capital Improvements Program and by improvements built along with new development.

Cupertino uses site planning criteria to control development to obtain a more efficient street system. The area plans controlling development next to major arterials have design standards that strictly limit the number of access points to the property. Curb breaks are typically shared by adjoining properties and developers are required to record reciprocal circulation easements to let adjoining properties share roads and gain access to secondary streets that intersect with major arterials.

The North De Anza Boulevard plan requires property owners to participate in the construction of ~~a new access road~~ Bandley Avenue that parallels De Anza Blvd. A system of private driveway connections is required to link adjoining parking lots. As a result, De Anza Blvd. has few curb breaks and few side restrictions to slow traffic. The policy's secondary benefit is that the lack of curb breaks has resulted in an attractive streetscape.

Policy 4-5 : Driveway Interconnection

Discourage direct access from adjoining properties to major arterial streets. Require access by interconnecting private driveway networks to connecting side streets or other major entrance points unless this is unsafe or impractical because of the established development pattern.

Cupertino uses a computerized traffic signal interconnect system to increase the capacity of arterial streets to carry traffic. The system controls the flow at intersections to favor commute traffic. Green lights are longer on major arterials to encourage shoppers, commuters, and employees to use those streets.

These policies encourage travelers to use the arterial system. Cupertino discourages drivers from other cities from using local streets and, where appropriate, local collector streets, by means of stop signs, speed bumps, raised medians, diverters, and intensified enforcement of speed limits.

Policy 4-6: Protection From Effects of Transportation System

Work to protect the community from noise, fumes, and hazards caused by the City's transportation system.

Policy 4-7: Neighborhood Traffic Management

Develop traffic management plans for neighborhoods affected by unacceptable levels of through traffic. Design these plans based on the concept that commute or through traffic should be redirected from local residential streets and minor collectors to the freeway, expressway, and arterial and major collector streets.

Policy 4-8: Abusive Driving

Continue to study and carry out techniques that discourage abusive driving on local neighborhood streets, including intensified enforcement of speed laws, enforcement of State muffler laws, and review of traffic management strategies.

Accommodating Alternatives to the Automobile

Development of travel routes and methods that are alternatives to the automobile will increase the efficiency of the system. However, until alternatives are widely accepted locally, Cupertino cannot rely on them to reduce traffic levels noticeably. The City will encourage alternatives to the automobile to offer choices in improving the quality of life for people willing to use them. Bike lanes must be safe and conveniently located. Buses must be frequent and be able to use preferential lanes where possible.

Policy 4-9: Reliance on Usage of Private Cars

Promote a general decrease in reliance on private cars by accommodating and encouraging attractive alternatives.

Strategies

1. **Alternative Transportation.** Encourage use of alternative transportation such as bicycles and motor bikes as well as techniques that increase the number of people in each vehicles, such as buses and van and car pooling.
2. **Street Space for Alternative Transportation.** Provide space on appropriate streets for bus turn-outs, safe and accessible bike lanes, and pedestrian paths.
3. **On-Site Bike Facilities.** Require on-site bicycle facilities, including parking facilities, showers and clothing storage lockers, in industrial and commercial developments.
4. Coordinate bicycle route planning with surrounding cities and the Count in order to provide for the commuting needs of workers, shoppers and students and the travel needs of park users.
5. Encourage freeway overpass construction to provide adequate design and width to accommodate bicycle lanes and pedestrian crossings.
6. Use the Cupertino Scene and other media to provide educational material on non-motoring travel.
7. Continue to work with the City Bicycle/Pedestrian Advisory Committee, community groups, and residents to eliminate hazards and barriers to bicycle and pedestrian traffic.
8. **Jitney Shuttle Service.** Consider the possibility of creating a ~~jitney~~ shuttle service to link a proposed bus transfer station in Vallco Park with Town Center and North De Anza Blvd. Reassess the feasibility of requiring car or van pooling.

Alternative transportation can enhance recreational opportunities. Figure 4-E shows a plan for bikeways. It coordinates directly with bikeways planning by the County and the MidPeninsula Regional Open Space District.

Policy 4-10: Regional Trail Development

Continue to plan and provide for a comprehensive system of trails and pathways consistent with regional systems, including the Bay Trail and proposed Ridge Trail. The general alignment of the Bay Trail, as shown in the Association of Bay Area Governments' Bay Trail planning document, is incorporated in the General Plan by reference.

FIGURE 4-D

Tiered Traffic Mitigation Program

The Tiered Traffic Mitigation Program provides a mechanism to enable qualified developers/employers to increase building area above levels allowed by applicable Floor Area Ratios (FARs). Developers/employers may increase building area when it can be demonstrated that peak PM trips can be reduced beyond base levels experienced by the specific applicants prior to implementation of TDM programs.

TIER 1: FIXED DISCOUNT OF VEHICLE TRIP GENERATION

Tier 1 discounts are applicable to new development

1. A 5% discount will be applied if a standard Transportation Demand Management program is included in the project. The applicant must have a TDM Coordinator.

For example, elements of a TDM program may include:

-Transit passes

-Guaranteed Ride Home

-Bicycle lockers

-Preferred parking for carpoolers

2. A 5% discount will be applied to a company located near a transit (rail or major bus) line.

3. A 10% discount will be applied when a company implements number 1 and is near a transit line.

This represents the maximum discount available under Tier 1.

TIER 2. VARIABLE DISCOUNT OF TRIP GENERATION

Tier 2 discounts are applicable to existing and new development. The Tier 2 approach provides a mechanism to enable employers/business property developers to take advantage of housing and more aggressive TDM to increase employment density/building space without increasing traffic.

1. Housing: The tier 2 approach recognizes the synergism between increased housing opportunity and new forms of TDM. Traffic reduction discounts may be taken when:

a. Provision of on or off site housing combined with other TDM strategies with a demonstrated reduction in PM peak hour trips.

b. Assure compliance of housing creation and TDM performance through a development agreement which provides sanctions for lack of performance.

2. Examples of aggressive TDM programs are:

a. telecommuting and satellite telecommuting

b. shuttle systems

c. compressed work week

d. village design (on site services)

e. satellite park and ride lot

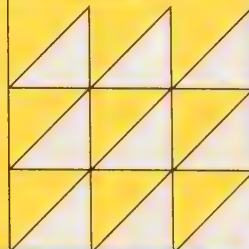
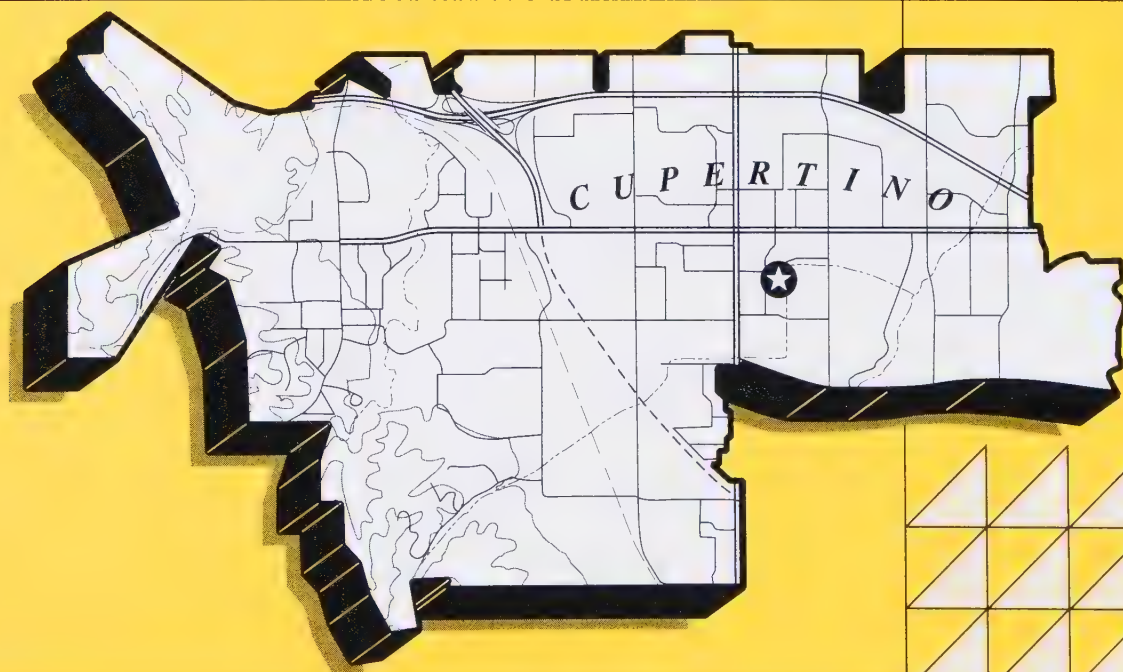
f. peak hour express bus system

Adoption of aggressive TDM Program will require a proven track record and the establishment of performance standards with a monitoring system. Sanctions will be developed to ensure compliance.

TIER 3: IMPROVE TRANSPORTATION SYSTEM CAPACITY

(applicable after implementation of Tier 1 and 2 techniques)

Implement Transportation System Management (TSM) techniques such as the DeAnza/Stevens Creek Blvd. underpass. Approvable development based on traffic analysis of projected increase in peak hour traffic capacity of street system.



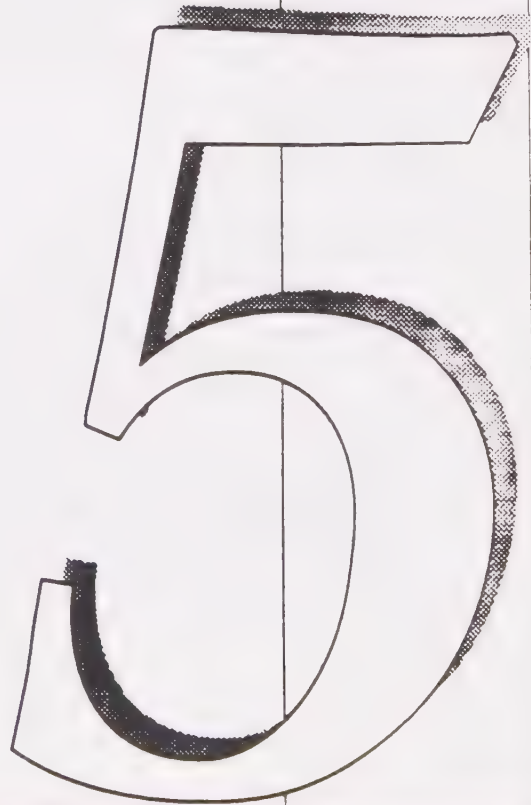
Environmental Resources



INSTITUTE OF GOVERNMENTAL
STUDIES LIBRARY

FEB 26 1973

UNIVERSITY OF CALIFORNIA



Introduction

Land used to be thought of solely as a commodity to be bought, sold, and developed for the largest private profit with little regard for public cost or environmental harm. The unchecked growth caused by this attitude made urban lands scarce, clogged the streets, polluted the air and water, and made it necessary for cities to increase taxes to supply services for inefficiently planned communities. This attitude has changed; people are more aware that the quality of life depends on the community setting.

The General Plan is a tool for making day-to-day judgments on public policies dealing with stewardship of the land.

Open Space Planning

Open space planning includes buying and developing land for parks, protecting watersheds and reservoirs, allowing for farming in or next to urban areas, and creating opportunity for privately owned recreational sites.

Conservation Planning

Conservation means responsible human coexistence with plants and animals, responsible mineral extraction, and preservation of ground water recharge areas.

Conservation and Management of Resources

Conservation is a creative opportunity to use wisely the resources needed now and to be sure these resources are available for future generations. This element inventories Cupertino's key resources and outlines policies for their use and preservation.

Agricultural Lands

Goal A: Avoid the premature conversion of agricultural lands to urban uses within the City's Urban Service Area.

In 1990, the amount of farmland in Cupertino's urban service area was negligible. Farmland has been taken over for urban uses rapidly since 1970, when farms covered about 23 percent of Cupertino's planning area. By 1977, that figure had slipped to eight percent.

Cupertino, like the rest of Santa Clara County, has one of the best growing climates in the state, but farming here cannot compete with other California cities because labor and water costs are higher and production efficiency is lower. Even flower growers, who had been successful until recently, have suffered declines because of Latin American competition.

~~Cupertino~~ The City has signed Williamson Act contracts with ~~two~~ three property owners in Cupertino on the valley floor. The act, also called the California Land Conservation Act, protects farmland and grazing land from taxation as ~~developed~~ developable property. ~~These two farms~~ Two of the properties are still pressured for more intensive development and probably will not remain as farms/grazing land much longer. The Williamson Act has had little effect in preserving prime growing lands over the longer term in Cupertino.

Policy 5-1: Williamson Act Properties

Designate properties under Williamson Act contracts in the General Plan for their anticipated developed use to plan for future public service and utility demands and to ensure that development will be consistent with community character.

Policy 5-2: Agricultural Recognition

Recognize and support agricultural land uses, which provide food and fiber, enhance air quality and visually and functionally define rural/open areas from urban land uses ~~farming's aesthetic and educational value~~ in public land use and urban development review processes.

Cupertino's demonstration farm and orchard will continue to serve schools and youth service organizations as a field trip site. Cupertino will set aside community vegetable gardens in parks that have a rural flavor and will offer gardening classes through the Recreation Department.

Policy 5-3: Farming and Grazing

~~Encourage~~ Maintain farming and grazing on the hillsides to preserve open space and monitor to prevent erosion.

Air Quality

Goal B: Strive to maintain acceptable air quality levels for the people of Cupertino.

Goal C: Utilize local planning efforts to improve air quality regionwide.

Clean air is a natural resource of vital importance. Pollutants in the air can cause health problems - especially for children, the elderly and people with heart or lung problems. Healthy adults may experience symptoms during periods of intense exercise. Pollutants can also cause damage to vegetation, animals, and property.

The Federal and State Clean Air Act is are the primary regulators of air quality but day-to-day responsibilities fall under the regional Bay Area Air Pollution Control Quality Management District. The air quality analysis here is from the district's Air Quality Management Plan for the Bay Area.

State and Federal Clean Air Standards are exceeded in Santa Clara County many times a year.

Air pollution potential is based upon the tendency for high pollutant concentrations to develop at a given location. This potential is dependent upon the amount of pollutant emitted into the air and the local atmosphere's ability to transport and dilute the pollutant. The county's topography, prevailing wind pattern and frequent air inversions combine to catch and hold the pollutants that the urban area releases daily into the air. Air pollution is composed of a vast assortment of gases and particles which can be grouped in three categories: ozone, carbon monoxide, and particulate matter. A large proportion of air pollution in Santa Clara County is automobile related.

Our existing development pattern countywide contributes to the further deterioration of air quality. For example, the majority of affordable housing for low to moderate employees is on the outskirts of the county or in adjoining cities and communities. This requires the employees to commute daily to and from work which in turn increases air pollution countywide. Also, much of the citywide residential areas are detached from commercial uses which in turn requires residents to drive their vehicles to complete errands. This tends to increase air pollution within the community. Land use planning is beginning to change with these considerations in mind.

As Santa Clara County continues to be the population and employment growth center of the region residents, employers and municipalities must take responsibility for the impacts of air pollution on the quality of life. ~~Cupertino's air is often full of particles that reduce visibility and harm human health. This section describes the most common air pollutants and their sources and outlines policies to improve air quality.~~

Principal Pollutants of the Air Basin

Particulate Matter

Particles enter the air when the wind erodes the earth, when minerals are quarried, from construction projects and from automobile engines, tires, and brake linings. Larger particles are rapidly expelled by the natural defenses of the human body but very small particles can remain deep in the lungs for weeks or years. Some airborne particles are toxic in themselves or become toxic when they combine with other air products. ~~Organic compounds from inefficient burning of solid waste or diesel fuel have been found to cause cancer over time.~~

Fine particles in the air are major culprits in the low atmospheric visibility typical of the valley. The particulates have major health effects and have been linked to high rates of lung cancer in polluted urban areas. Between 1983-1990 the Federal Standards were exceeded three days and the State Standard was exceeded 177 days out of the eight years in the Bay Area. Examples of major contributors to particulate pollution is the Kaiser Aluminum and Chemical Corporation and Kaiser Cement and Gypsum Corporation. This plant alone emitted, in 1990, 250 tons per day of particles into the air.

Carbon Monoxide

About 90 percent of carbon monoxide pollution comes from motor vehicles. Carbon monoxide, a product of incomplete combustion, displaces oxygen in human blood, diminishing people's ability to perform mentally and physically. Higher concentrations follow highway patterns and are related to traffic speed and congestion.

Because the gas is mostly from cars and trucks it is most concentrated near major roads and is heavily increased in the congested morning and evening rush hours. Regionwide, between 1987-1989, the number of days carbon has exceeded both State and Federal maximums was significant. During 1990 the number of days has decreased. Because the Bay Area cannot attain the Federal or State Standards, it has been designated as a "non-attainment area" and a plan of control is required.

Ozone

Unlike other pollutants, ozone is not emitted into the atmosphere. Rather it is created from ozone precursors which are nitrogen oxides and hydrocarbons that emanate from combustion, factories and automobiles and from the evaporation of solvents and fuels. State and Federal ozone exceedences have generally decreased in the last decade with 53 State and 21 Federal exceedences in 1983, compared the 14 State and 2 Federal exceedences in 1990.

Regional, State and Federal Planning

Air Quality Standards are set forth by both the State and Federal government. The Bay Area Air Quality Management District has the responsibility to monitor and enforce State Standards in the Bay Area. Planning for compliance with the Federal Air Quality Standards has been assumed in part by the Association of Bay Area Governments which, with the Bay Area Air Quality Management District, prepared the Air Quality Management Plan for the San Francisco Bay Region. Among the actions recommended by this plan are many policies and programs which local governments can undertake to help achieve the essential improvements in air quality.

The California Clean Air Act of 1988 requires a 1991 plan to meet State Ambient Air Quality Standards for ozone and carbon monoxide by the earliest practical date. The Act requires regions to seek a 5% per year reduction in pollutant emissions by implementing all feasible emission reduction measures. The Clean Air Plan was prepared by the Bay Area Air Quality Management District, Metropolitan Transportation Commission and the Association of Bay Area Governments. The Clean Air Plan was adopted by the District October 1991. State emission standards are more restrictive than Federal standards and therefore, this plan is expected to also satisfy federal requirements.

Air pollutant emission reductions will come from new motor vehicle emissions standards, enhanced inspection/maintenance, tighter controls on new and existing stationary pollution sources and transportation control measures.

Responsibilities of the City

While air quality is often regarded as a regional problem, it is fundamental that the land use and growth decisions attempt to combat air pollution. The land use, transportation, energy and environmental policies that comprise this plan will all act in conjunction to meet the State Air Quality reduction plans.

Air Quality Policies

The Plan's Circulation Element encourages alternative modes of transportation to reduce traffic on major streets, making commuter trips more efficient. It also encourages protection of residential neighborhoods from through commute traffic.

Increasing the efficiency of traffic flow will decrease congestion and air pollution. Using traffic management devices such as diverters, circuitous road systems, and stop signs to discourage commute traffic in residential neighborhoods will hurt air quality by making trips longer. The Stevens Creek Boulevard Plan Line/General Plan Study demonstrated that improving the boulevard would decrease congestion and pollutants. It also showed that a diverter system on Byrne Avenue and Orange Avenue would make trips longer, increasing neighborhood air pollution.

~~The traffic signal interconnect system on Stevens Creek Boulevard and De Anza Boulevard will save about 400,000 gallons of gasoline yearly. If this gas were burned, it would worsen air pollution for the neighborhood and for cities downwind. Installation of boulevard stop signs on Blaney Avenue will increase gas consumption between Merritt Drive and John Drive. About 140,000 gallons will be used over a year as a result of installation of five new stop signs.~~

Cupertino discourages drive-up windows. On a small scale, this does not improve air quality much. But, depending on the design of the window, customers waiting in line with their engines idling could be exposed to high levels of carbon monoxide and other pollution, endangering people who have cardiovascular or lung disease. Handicapped people and parents who do not want to take children into a bank or restaurant will be inconvenienced, but the City's policy of removing barriers to the handicapped and encouraging walk-up windows should help.

Policy 5-4: Air Pollution Effects

Continue to assess air pollution effects of future land use and circulation planning.

Policy 5-5: Dust Control

Continue to require the use of water or/oil to control dust during construction activities.

Policy 5-6: Clean Air Education

Initiate a citywide public education program regarding the implications of the Clean Air Act and provide information on ways to control emissions.

Policy 5-7: Regionwide Cooperation

Actively pursue cooperation among region wide agencies to improve air quality.

Policy 5-8: Land Use Decisions

Ensure that local land use decisions support the goal of clean air.

Policy 5-9: Home Occupations

Continue to allow home occupations in all residentially zoned properties.

Policy 5-10: Street Trees

Increase street trees on public property and tree planting on private property.

Policy 5-11 Fuel-Efficient Vehicles

Look into buying more fuel-efficient vehicles for City use.

Policy 5-12 Jogging and Bicycling Warnings

Use the Cupertino Scene and other publications to tell residents about the danger of inhaling pollutants while jogging and bicycling near busy streets. Expand the par course and jogging trails to meet demand.

Wildlife and Vegetation

Goal D: Preserve and protect special areas of natural vegetation and wildlife habitation as integral parts of the environment.

~~Wild animals live mostly in the western foothills, not on the urbanized valley floor. This is because the valley is heavily populated, buildings are under construction, animal food and nesting materials have been removed for fire and weed control, and dogs and cats kill native birds and mammals that inhabit open fields in the City.~~

~~Birds, fish, and mammals live in the foothills in abundant variety, especially in the streambed habitat of Stevens Creek.~~

Cupertino's wildlife and natural vegetation resources are concentrated in the relatively undeveloped western foothills and mountains and along Stevens Creek, not on the valley floor. Urbanization of the valley floor has rendered this environment ill-suited to the needs of wildlife and native plants. Most of the native vegetation was removed by historic agricultural activities and the introduction of non-native grasses and crops. Native vegetation was further reduced by the more recent construction of homes, businesses, industries and its infrastructure that support this suburban community. The loss of vegetation also meant a concomitant loss of wildlife habitat which provided food, cover and shelter for numerous wildlife species.

Streamsides

~~Streamside vegetation follows the banks of Stevens Creek, a stream that flows year-round, and along the intermittently flowing banks of Regnart Creek and Heney Creek on the valley floor. There are trees, shrubs, vines, and plants of many kinds that provide a habitat for many varieties of birds and animals not found nearby. Willow, sycamore, live oak, toyon, blackberry cattail, and spike rush are characteristic. The yellow warbler and Wilson's warbler as well as the fox squirrel are streamside inhabitants declining in population.~~

Riparian vegetation grows along stream courses where there is fertile soil and ample water. It often appears as a distinct band of vegetation when contrasted against other uses. Such vegetation can be found along Stevens Creek, Permanente Creek, Regnart Creek, Heney and portions of Calabazas Creek. Common plants include willow, California bay, California buckeye, Coast live oak, coyote brush, poison oak and California blackberry. Riparian habitats are considered among the most valuable habitats for wildlife because of the presence of water, lush vegetation and high insect populations. Less disturbed riparian areas support a wide variety of wildlife, including amphibian, reptile, bird and mammal species.

Grasslands

~~There are grasslands on the lower slopes of the western foothills and at some of the peaks of the Montebello Ridge system. Dominant plants include yellow star thistle, yellow mustard, wild oats, and rye grass. Much of the land was formerly used for pasture. Many of the species were introduced by humans and have adapted well to the climate, to grazing, and to development of nearby orchards.~~

~~The western meadowlark, not considered a rare species, depends on grasslands. It is a permanent grassland resident and is declining in population.~~

Grassland habitats occur on the lower slopes of the western foothills and at scattered locations at higher elevations in the Montebello Ridge system. Much of these areas were formerly used for pasture and are largely composed of non-native grasses. Plant species occurring in this habitat include wild oat, clover, rye grass and vetch. During the spring season, displays of wildflowers are expected which may include California poppy, plantago and owl's clover.

Reptile and mammal species adapted to dry conditions are common in this habitat. They include the western fence lizard, western rattlesnake and common king snake. Mammals include a variety of burrowing rodents such as meadow mice and California ground squirrel.

Brushlands

~~Dominant species are coyote bush, poison oak, and varieties of ceanothus and wild rose. Brushlands are generally on steeper slopes or in areas between streamside and woodland habitats in dry locations. There are no threatened animal species here.~~

Brushlands are a scrubby, dense vegetation type that often integrades with woodland habitat. This vegetation is often found on dry, rocky steep slopes. Dominant plant species include: coyote brush, poison oak, California sage and ceanothus. Common animal species include: Scrub jay, California quail, and deer mouse. Mule deer, brush rabbit, bobcat and coyote utilize brushlands as part of a larger home range.

Foothill Woodlands and Forests

Characteristic of the woodland vegetation is ~~are~~ scattered oak trees with an undergrowth, in some areas, of plants and low shrubs. Higher elevations in the Montebello Foothills include mixed hardwood trees and evergreens, including redwoods. Woodlands benefit wildlife as a food source, and as shelter, nesting, or cover; they help control erosion from foothill draining basins; they reduce wind speeds, increasing the oxygen in the atmosphere and neutralizing certain air pollutants.

Woodlands provide visual relief from the urbanized valley floor. The Montebello Ridge system's extensive tree cover gives seasonal color variation, variety of shape, and definition of hillside contours. ~~Endangered wildlife species are the San Francisco garter snake and Cooper's hawk. Both are declining in population.~~ Insect or seed eating birds and mammals are common in the woodlands and are preyed upon by raptors and owls that also inhabit these areas. The larger mammals, deer, coyote, etc., utilize these areas as well.

Impacts and Mitigation

Human activity, particularly urban development and resource extraction, is the most destructive influence on plants and animals in Cupertino. Urbanization of mountain lands and construction of new housing next to streambeds will likely destroy vegetation. Grading for roads and building sites and leveling for septic tank drain fields also destroys vegetation and creates potential for soil erosion. Fire also threatens vegetation and the animals that depend on it for food and shelter.

Fire suppression is a mixed blessing to the natural environment. It maintains the scenic beauty of the wildlands, protects life and property, and, at least on the surface, enhances wildlife habitat. But, wildfires are a natural phenomenon. Some local mountain plant species rely on periodic low-intensity fires to germinate seeds and cut down competing plants. Wildlife forced out by fire may be able to survive if there is a suitable environment nearby. But if development and other human changes of the environment make a new home for wildlife impossible, certain animals may be forced out of the urban fringe or out of Cupertino's planning area altogether.

These policies will protect animal and plant life in Cupertino's planning area.

Policy 5-13: Public Project Landscaping

Encourage public and quasi-public agencies to landscape their city area projects near native vegetation with appropriate native plants.

Policy 5-14 : Development Near Streambeds and In Foothills

~~Design development in the foothills or near streambeds to disturb the natural vegetative cover as little as possible and to minimize removal of specimen trees.~~

Policy 5-14: Landscaping Near Sensitive Areas

Encourage the clustering of new development away from sensitive areas such as riparian corridors, wildlife habitat and corridors, public open space preserves and ridgelines.

Policy 5-15: Landscaping Near Natural Vegetation

Emphasize drought tolerant native plants and ground covers when landscaping properties near natural vegetation, particularly for control of erosion from disturbance to natural terrain.

Policy 5-16: Natural Area Protection

Minimize lawn area and maximize the number of native trees.

Strategy:

Amend the RHS ordinance to emphasize drought tolerant native plants and native trees and to minimize lawn area.

Policy 5-17: Hillside Property Fencing

Confine fencing on hillside property to the area around a building, rather than around an entire site, to allow for migration of wild animals.

Policy 5-18: Outdoor Lighting

Outdoor lighting should be low intensity and shielded so as not to be visible off-site.

Policy 5-19: Recreation In Natural Areas

Limit recreation in natural areas to activities compatible with preserving natural vegetation, such as hiking, horseback riding, and camping.

Policy 5-20: Public Access

Provide public access to wildlife observation and fishing sites consistent with preserving important wildlife habitat.

Policy 5-21: Recreation and Wildlife Trails

Provide open space linkages within and between properties for both recreational and wildlife activities, most specifically for the benefit of wildlife which is threatened, endangered, or designated as species of special concern.

Strategy:

Amend the RHS ordinance to require identification of creeks and water courses on site plans and require that they be protected from adjacent development. The ordinance could state that trail easements for trail linkages may be required if analysis determines that they are needed.

Mineral Resources

~~There are several commercially significant deposits of limestone and crushed rock and the potential for quarrying gravel and sand in Cupertino's western foothills.~~

~~Much of the knowledge of the mineral significance of the Montebello Ridge comes from a study by the California State Division of Mines and Geology. Excerpts from that study will be discussed here. Mineral resource areas are outlined on the Plan land use map.~~

Limestone

~~Kaiser Cement and Gypsum Corporation's quarry of high grade limestone is the most prominent mineral extraction operation in Cupertino's planning area. The quarry opened in 1939 to supply cement for Shasta Dam. Quarry reserves are difficult to estimate because of the uneven terrain but recent investment in expanding the plant capacity will sustain output for many years.~~

Crushed Rock

~~Crushed rock is used for many purposes, including concrete aggregate, asphalt aggregate, roadway base, and fill. The by-product of Kaiser's operations is the highest quality crushed rock in Cupertino.~~

~~The Stevens Creek Quarry northwest of Stevens Creek Reservoir produces crushed rock from time to time. Regional population growth will continue to support demand for this product. The Montebello Ridge has many potential quarrying sites for crushed rock. The sites will be quarried when it is profitable to investors and operators. Cupertino should consider setting up a mineral resource area to provide enough space for quarrying and a suitable buffer zone.~~

Sand and Gravel

~~Sand and gravel are extracted intermittently from the former Voss Quarry at the northwest edge of Stevens Creek Reservoir. More extraction can be expected as it becomes profitable.~~

The State of California, recognizing the value of preserving the State's mineral deposits, enacted the Surface Mining and Reclamation Act of 1975 (SMARA). The objective of SMARA is to assist local governments in conserving mineral deposits for future use. The State identifies mineral resource areas and requires that jurisdictions recognize them and emphasize conservation and development of these areas. These mineral resource areas are shown in Figure 5-C.

There are mineral resource areas in the City's boundary agreements areas and in the City limits. Within Cupertino's boundary agreement areas there are two quarries, Permanente and Stevens Creek, which have been designated by the State as having mineral deposits of regional or state significance. Since the quarries are in the unincorporated area, Santa Clara County has jurisdiction. The County's mineral resource policies are directed toward preserving existing resource areas and, where feasible, designating new areas and expanding existing sites.

Within Cupertino's City limits are classified mineral resource areas for which the State also requires policies supporting preservation and extraction. Most of the areas are already developed into residential and other than uses. One area, the "Gravel Pit" is considered depleted. These areas, therefore, would not benefit from conservation. The areas that would benefit from conservation are outside the City limits.

Cupertino's proposed policies recognize the existence and potential of the identified mineral resource areas. However, proposed policies reflect an underlying assumption that quarries should be limited to their existing operations in terms of noise and traffic. For many years Cupertino residents have expressed concern about quarry pollution, noise and traffic. Cupertino officials have stated at public hearings that operation controls and limits should be set. New areas could be accessed as long as current noise and traffic levels are not exceeded and environmental concerns are met.

Policy 5-22: Mineral Resource Areas

~~Establish a mineral resource area designation to allow extraction.~~

New mineral extraction areas may be considered within Cupertino's sphere of influence, but the cumulative impact of existing and proposed activity should not exceed present operations in terms of noise and traffic. Work with Santa Clara County to assure that mining operations outside the City limits are consistent with the City's General Plan.

Strategy:

1. Traffic and Noise Studies

Perform traffic and noise studies if applications for increased mineral extraction activities are proposed.

2. Joint Study Process

Establish a joint study process in the sphere of influence and boundary agreement areas with Santa Clara County to reach agreement on future land uses.

Policy 5-23: Mineral Extraction Controls

Control scenic restoration and noise pollution as well as air and water pollution in mineral extraction quarrying, processing, and transportation.

Policy 5-24: Incompatible Land Uses

Conserve mineral resource areas outside the City by not allowing incompatible land uses in and around identified mineral resource areas. Uses considered incompatible are high density residential, low density residential with high unit value, public facilities, and industrial and commercial uses with intensive impacts.

Policy 5-25: Recreation at Old Quarries

Look into the desirability of designating abandoned quarries for passive recreation to rehabilitate the land.

Water Resources

Goal E: Protect and conserve water resources as they are vital to the environmental and economic health of Cupertino.

Goal F: Strive to minimize the quantity and improve the quality of storm water runoff consistent with the protection of groundwater quality and groundwater recharge areas.

Water conservation has been fragmented and sometimes ineffectual despite the increased attention it has received over the past few years.

Preservation of Watersheds

Cupertino has ~~46~~ 12 square miles of very productive watershed—hillside land with abundant vegetation and heavy rainfall. This watershed is important to the City and to the county. Grading plans for developments must be prepared to prevent erosion, protecting water quality in the City's drainage basin. Erosion control eliminates siltation, which makes the water cloudy and reduces wildlife populations and stream bed ground water recharge ability.

Ground Water Recharge Facilities

The ground water basin is the largest supply of water in Santa Clara County. It has an estimated storage capacity of 1,770,000 acre feet, compared to reservoir capacity of only 160,000 acre feet. The Santa Clara Valley Water District prevents too much water being drawn out by wells by placing recharge sites, sometimes called percolation ponds, throughout the valley where the geological composition of the soil is suitable. Two of these are located in Cupertino.

Policy 5-26: Ground Water Recharge Sites

Continue to support the Santa Clara Valley Water District to find and develop ground water recharge sites within Cupertino's planning area and provide for public recreation at the site where possible.

Policy 5- : Other Water Sources

Encourage the research of other water sources, including water reclamation.

Policy 5-28 Industrial Water Recycling

Encourage industrial projects, especially at the building permit approval stage, to include long-term conservation measures including recycling equipment for manufacturing and pooling water supplies in the plant. Work with the Cupertino Sanitary District to carry out this policy.

Policy 5-29: Natural Creek Beds

Retain creek beds, riparian corridors, water courses and associated vegetation in their natural state to protect wildlife habitat and recreation potential and assist ground water percolation.

Other Water Resources

Cupertino has three major water suppliers: California Water Service, Cupertino Water Utility, and San Jose Water Company. A private water service cooperative, the Reglin Mutual Water Company, serves part of Regnart Canyon.

Water comes from ~~three~~ two main sources: wells fed by ground water, ~~surface run-off into Stevens Creek Reservoir, contributing to ground water recharge;~~ and imported water from the Rinconada Treatment Plant. Cupertino gets about 1.6 million gallons a day from the ~~ground water~~ underground sources and about ~~1.2~~ 4.5 million gallons a day from the Rinconada plant. Stevens Creek Reservoir yields about 2,500 acre feet per year to the seasonal run-off from ground water recharge. The Santa Clara Valley Water District projects the total demand for Cupertino will be about 6.85 million gallons a day by 1990 1995 , ~~double the current demand.~~ Conservation which could be reduced the demands through conservation.

~~The San Felipe Water Importation Project has been supplying water since June, 1987. The Water District has studied the possibility of reclaiming waste waters for use in some farming and industry. The district has found that putting the San Felipe Project into effect and using reclaimed water at the same time would overfill projected demands by about 40 percent. Agricultural irrigation in the North County will drop to almost nothing by 1990.~~

Urban Water Conservation

~~Cupertino's industries are overwhelmingly oriented to new semiconductor technologies. This industry, concentrated in a small space in Cupertino, demands huge amounts of high quality water for manufacturing and discharges vast quantities of industrial waste into the sanitary sewer system.~~

~~Cupertino should continue to work with the Cupertino Sanitary District and other agencies involved in conservation and waste water management to implement these policies.~~

The Santa Clara Valley experienced a drought from 1988-1990 and additional future years of drought is expected. The four water companies within the boundaries of the City enforced water restrictions to comply with the directives of the Santa Clara Valley Water District to reduce overall water use by 25% during the high use months. This policy will be periodically reduced or increased based upon water reserves, water usage and rainfall amounts. Ground water pumping was also restricted because over-

pumping lowered the water table and ground settlement occurred throughout the Valley. The Santa Clara Valley Water District does not have sufficient allocations from the California Water Project nor the Federal Water Project, so water conservation is of great economic, social and environmental importance.

Citywide, the majority of the water connections and usage is residential. Therefore, the burden of water conservation falls largely on residential users. Even though the number of industrial connections may be less than residential, consumption is high per connection and conservation measures are still warranted.

Policy 5-27: Water Rates and Conservation

Refine the water rate schedule to give economic incentives for conservation.

Santa Clara Valley Water District

The Santa Clara Valley Water District indicates they have the ability to meet the long term water needs of Cupertino water retailers. The District Water Supply Master Plan has planned for growth, based upon ABAG's growth projections and all municipalities General Plan maximum growth potentials.

Policy 5- : Interagency Coordination

Actively pursue interagency coordination for regional water supply problem solving.

California Water Company

The California Water Service Company will increase water pressures 10 to 15 psi throughout the Cupertino Service area during the 1992 fiscal year. California Water Service will meet the Public Utility Commission minimum water pressure service area wide.

Reglin Mutual Water Company

Policy 5- : Reglin Water Annexation

Recognize that additional capacity requirements placed on Reglin Mutual Water Company would require that one of the adjoining utility companies annex and service users in the next decade (through year 2001).

Recognize that if annexed by Cupertino Municipal Water Company an increase in capital improvement projects and required financing would be required to enhance the water supply system.

Policy 5- : Local Conservation Policies Similar to Regionwide Policies

Continue to keep city-wide efforts of water conservation similar to those being conducted on a region-wide scale. Many of these conservation efforts are outlined in the Santa Clara Valley Water District Drought Plan and County-wide Water Use Reduction program.

Policy 5- : Public Information Effort

Continue providing the public information regarding the status of the drought and water conservation techniques. Consider sending regular notices to households and businesses on water prohibitions, water allocations and conservation tips. Continue to air conservation video tapes on the Cities government channel. Continue to provide water conservation kits to the community upon request.

Policy 5- : Prohibit Excessive Water Use

Prohibit excessive water uses throughout the City, irrigation of existing landscaping during the daylight, require large water users perform water audits. These and other policies shall be enforced until such time as an official declaration has been made by Santa Clara Valley Water District that the drought conditions no longer exist.

Policy 5- : Water Conservation Program

Undertake programs for long-term water conservation at City buildings including installation of low flow toilets and installation of auto shut-off valves in sinks of park buildings.

Nonpoint Source Pollution

Nonpoint source (NPS) pollution is caused by the accumulated debris and chemicals on streets and pavements which are carried by water runoff into the storm drain system and eventually into South San Francisco Bay. Unlike pollutants that come from a point source, such as a sewer pipe, NPS pollutants are washed from streets, parking lots, neighborhoods, construction sites and other exposed surfaces throughout the City.

While NPS pollutants come from a variety of sources, many of them are familiar to residents because they originate from the home and automobile. NPS pollutants include detergents, paint products, pet wastes, garden pesticides, fertilizers, eroded soils, motor oil and car exhaust. Since the storm drains are separated from the sanitary sewers, pollutants carried by water runoff into the storm drain are not treated and flow directly into the creeks and streams that feed San Francisco Bay.

Previously, it was widely believed that wastewater treatment plants, industries and other "point sources" were the main contributors of contaminants to the Bay. Today, nonpoint sources are recognized as significant contributors to Bay pollution. The concentrations of NPS pollutants can have deleterious effects on aquatic wildlife which include the impairment of growth, reproduction and overall health of sediment-dwelling organisms, fish and other wildlife. Some toxic substances accumulated by aquatic organisms enter the food chain when consumed by larger fish, birds or humans.

Government Action

At the instigation of South Bay cities, the Regional Water Quality Control Board and federal mandates have required the protection of San Francisco Bay through the control of nonpoint source pollution. Fifteen Santa Clara County jurisdictions, including Cupertino, that discharge into San Francisco Bay have joined together to develop and implement a Storm Water Management Plan. This association of agencies, known as the Santa Clara Valley Nonpoint Source Pollution Control Program, is continuing to identify feasible solutions to control nonpoint source pollution.

Policy 5-30 Nonpoint Source Pollution

Continue to support and participate in the Santa Clara Valley Nonpoint Source Pollution Control Program in order to cooperatively reduce nonpoint source pollution with other cities that discharge storm waters into San Francisco Bay.

Policy 5-31 Storm Water Runoff

Encourage the reduction of impervious surface areas and investigate opportunities to retain or detain storm runoff on new development.

Policy 5-32 Development on Septic Systems

Do not permit urban development to occur in areas not served by a sanitary sewer system, except the previously approved Regnart Canyon Development.

Energy Conservation

Escalating energy costs and decreasing availability of fuel sources reinforce the need for energy efficiency. Energy conservation is an individual responsibility to some extent and personal efforts may work better and cost less than a complex system of government regulations. This section discusses the energy use problem and gives local conservation policy options.

Regional Perspective

In 1972, 19.5 percent of the nation's energy was used for residential and commercial applications, transportation used 24 percent, industry 31 percent, and electrical utilities 24.5 percent. About half of the energy used by households is wasted. Home heating is the largest cause of waste; it uses 65 percent of the residential energy budget and makes up 80 percent of the wasted energy. Water heating takes about 13 percent of the budget, lighting about 10 percent, and cooking and air conditioning five percent each.

In California, 96 percent of homes are heated by gas, the rest by electricity. Very little coal, oil, or wood are used for home heating. In 1972, the Bay Area energy was used this way: homes, 17.1 percent; commercial, 6.5 percent; refineries, 18.4 percent; utilities, 15.4 percent, industrial, 10.6 percent; transportation 30.5 percent, and miscellaneous, 1.6 percent.

During 1972, 2.8 million cars and light-duty trucks consumed 6,000,000 gallons of gasoline while driving about 76,000,000 miles, taking up about one quarter of the daily energy budget.

In the Santa Clara Valley, the average daily household use is about 15 kilowatts of electricity and about 3.3 therms of natural gas.

In Cupertino, a considerable amount of energy could be saved by making home heating and water heating more efficient or finding alternatives to current processes; making lighting, cooling, and cooking more efficient; and reducing unnecessary use of automobiles.

The Cupertino Planning Department found that people who live in the flatlands use only about 15 percent of the total energy demand for transportation because they are near major roads, while people who live on hillsides use twice that amount.

Energy usage could be reduced by at least a third if these suggestions are followed.

Residential Energy Use Mitigation Measures

1. Types of Construction

Single-family detached houses lose more heat per square foot of floor area than individual dwellings in multiple-family buildings. Less exterior wall area compared to floor area also reduces energy loss. So, a rectangular or L-shaped one-story house loses the same amount of heat as a two-story square house when both have insulated walls and ceilings. Floor plans with an H-shape or T-shape lose even more heat compared to the square layout.

2. Insulation/Heat Loss Protection

Floor, wall, and ceiling insulation reduces interior heat loss. A well-insulated house in the Bay Area has little need for air conditioning on most warm days. Insulation designated R-19 in ceilings and walls and R-11 in floors cuts heating and air conditioning costs considerably. These designations are higher than those required under California law.

If the building has perimeter heating ducts under the slab, it will lose even less heat if there is edge insulation.

Insulated thermal windows, storm doors, and sealed fireplace flues further reduce energy loss from inside the building. Light-colored exterior paint makes the indoors cooler.

In multiple-family buildings, a heat pump system can provide home heat, water heating, and air conditioning using less than half the energy needed to do the same thing with conventional heaters and coolers. Solar heat collection panels can augment the usual pool heating system.

3. Orientation of Buildings

Buildings built on hills will need an eave overhang of 24 to 32 inches to shade exposed walls windows from direct summer sunshine. In the winter, the sun's lower path through the sky allows some rays to penetrate under the eaves to supply some heat.

It is best to use more windows in walls that face southeast, south, and southwest and to shade them with trees, shrubs, awnings, or eaves to reduce summer heat gain. Planting evergreen trees near north-facing walls reduces wind. Leafy trees shade the south walls in the summer and allow solar heat gain when they shed their leaves in winter. Shrubs, trellises, and hedges should provide natural wind breaks for building entrances. Air conditioner condensers must be shaded and have plenty of natural ventilation to increase compressor efficiency and reduce energy use.

Transportation Energy Conservation Practices

People rely on their cars in the Santa Clara Valley, and these cars are a principal source of pollution. They inefficiently consume vast amounts of gasoline, the materials needed to build them, and the roads they run on.

Cupertino provides incentives to use alternative transportation. Major industrial development approvals have required experimental employee van-pooling. A major bus system transfer facility is planned for Vallco Shopping Center to encourage commute trips.

Recognizing that people will probably prefer to use their cars for transportation for many years to come, the City Council approved construction of an electronic traffic signal interconnect system for the major commute boulevards. This system will ease traffic and reduce the number of stops by making it possible to control signals flexibly and sensitively over a longer portion of the commute path. If this system functions correctly, air quality, gasoline economy, and vehicle operation cost will improve.

Open Space Resources

Goal G: Preserve and acquire open space lands for the preservation of natural resources, the managed production of resources, for outdoor recreation, and for public health and safety.

Public Open Space Management

Several public agencies share the task of acquiring, maintaining, accessing, and developing open space lands for the enjoyment of residents of Cupertino and its neighboring cities. Some of these public open space lands provide intensive or low-intensity recreation; some emphasize scenic beauty; others preserve vegetation or wildlife habitats; still others help control urban sprawl.

Midpeninsula Regional Open Space District

The District, created in 1972 by the County electorate, has as its major goal preserving, undisturbed, unique and sensitive wildland habitat by carefully controlling access. District lands in Cupertino are designated for low-intensity use to give long-term protection from encroaching urbanization. These lands were acquired according to three principal criteria: scenic preservation, preservation of unique sites, and the guidance of urban form. ~~Guidance of urban form is probably the District's most controversial acquisition strategy. The District has purchased key properties in Cupertino's planning area. The effect of the purchases is to restrict further extension of streets and utilities into the foothills and to contain future growth within Cupertino's urbanized valley floor. This de facto growth management policy could be considered a preemption of local use planning prerogatives. The~~ Guidance of urban form requires cooperation and coordination with Cupertino's planning efforts. Consequently, the Cupertino City Council and the District Board agreed to a review procedure in 1976 of District purchases in Cupertino's planning area. The informal agreement provides for City review of potential purchases within the planning area and no review of acquisitions outside the planning area.

Santa Clara County

Most of the hillsides in Cupertino's planning area are unincorporated and undeveloped, so Santa Clara County's hillside policies and ordinances dictate their final land use. The County's General Plan calls for the hillside area to be preserved in an open condition with uses that support and enhance the rural character, which protect and promote wise use of natural resources, and which avoid or reduce the risks imposed by natural hazards found in these areas. Allowed uses include very low density residential development, mineral extraction, agriculture, grazing and wildlife refuges, among others. The number of houses allowed to be built is controlled by a slope density formula which ranges from 20-160 acre minimum parcel sizes increasing with the steepness of the slope. The theoretical maximum number of houses ranges from 115 to 190.

Cupertino expects that the Board of Supervisors will amend the Montebello Plan to reflect the more restrictive limitations and the City Plan will be amended accordingly.

~~Policy 5-33: Montebello Ridge Plan~~

~~Encourage the Santa Clara County Board of Supervisors to amend its Comprehensive General Plan to reflect the RHS 20 zoning restrictions.~~

Santa Clara County Parks Program

This program operates on a tax over-ride to acquire and develop a regional park system. It emphasizes completing Upper Stevens Creek Park and its connection to Stevens Creek. Because the upper portions of Stevens Canyon are environmentally sensitive, the County Parks and Recreation Department has made a commitment to expand these two parks. Currently the County is preparing a Master plan for upper and lower Stevens Creek Parks. Since acquisitions are complete, future emphases will be on long-range development. ~~should be asked to re-evaluate its commitment to development and determine whether acquisition should be given higher priority for those two parks. Parks Department representatives have said that the County is becoming more aware of long-term maintenance costs and that the new Capital Improvements Program may place more emphasis on acquisition.~~

Policy 5-33: Stevens Creek Park

The Santa Clara County Parks program should pursue the goal of connecting Upper and Lower Stevens Creek parks. The County Parks budget should emphasize acquisition rather than development expenditures, since development creates traffic and disturbs the pristine nature of the hillsides.

~~Recommend that the County Board of Supervisors reaffirm the goal of connecting Upper and Lower Stevens Creek Park. Ask the Board to consider whether the heavy emphasis on development will create traffic that will harm the pristine sections of the hillside, and to examine whether funds are better spent on acquisition.~~

Table 5 A. ~~Santa Clara County Charter Parks Amendment.~~

	Proposed Budget		Actual Expenditure	
	1972 - 1982		1972 - 1978	
	Acquisition	Development	Acquisition	Development
Lower Stevens Creek		400,000		259,500
Stevens Creek Connection	2,000,000	400,000	55,000	
Upper Stevens Creek		900,000		5,500
Skyline Recreation Route ⁽¹⁾	2,600,000			
Rancho San Antonio ⁽²⁾		2,838,000		
TOTAL	4,600,000	1,700,000	2,893,000	265,000

⁽¹⁾ ~~Skyline Recreation Route involves scenic easements and linear parks for a geographical area from San Benito Co. to San Mateo County on the north.~~

~~—The County plan concentrates on parcels located in Cupertino Sphere of Influence~~

⁽²⁾ ~~The 132 Acre Rancho San Antonio was not considered in the initial 1972 plan.~~

Santa Clara Valley Water District

The District can continue to help Cupertino carry out its open space policies. It helped Cupertino prepare its natural flood plain policy for the reach of Stevens Creek between Stevens Creek Boulevard and the reservoir and directly helped to buy open space lands within McClelland Ranch Park. It also created a Flood Protection Program for that reach of Stevens Creek next to the Creston and Oakdell Ranch neighborhoods.

The District is studying the ability of Stevens Creek Reservoir to withstand earthquake damage. The preliminary report shows that the reservoir may sustain damage if an 8.3 magnitude earthquake occurs on the San Andreas fault. If further studies show that the reservoir is unsafe, one option is to abandon it, declare it as surplus, and sell it privately.

Policy 5-34: Stevens Creek Reservoir

~~Work to keep the watershed and storage basin properties of Stevens Creek Reservoir in public ownership if the Santa Clara Valley Water District decides to abandon it.~~ The District upgraded Stevens Creek Reservoir in 1986 and it is being refilled to full capacity as weather permits.

OPEN SPACE POLICIES AND PROGRAMS

Cupertino's main role in open space planning is in developing neighborhood parks. The City has policies that encourage the Midpeninsula Regional Open Space District and the County Park System to complete phases of their programs and to buy certain properties it feels need to be owned by the public but still kept undisturbed.

Figure 5-E identifies these properties. Cupertino intends to create a continuous open space green belt next to its planning area.

Policy 5-35: Continuous Open Space

~~Encourage~~ Actively pursue inter-agency cooperation in buying properties near the western planning area boundary limit to complete a continuous open space green belt along the lower foothills. Purchasing of the Seminary property is a top priority.

The Stevens Creek Flood Plain is Cupertino's most prominent urban open space resource. The land is designated for recreation and farming, with adjoining properties set aside for low-density residential use.

Since the late 1950s, many jurisdictions have advocated a formal urban trail following Stevens Creek, extending from the San Francisco Bay to the Pacific Ocean. Cupertino's 1964 and 1972 plans proposed an ambitious plan to buy lands for this purpose.

The barrier caused by Interstate 280 along with the encroachment of residential development breaks the continuity of the ocean-to-bay trail system. So, there will most probably be urban links connecting the trail from Homestead Road to Lower Stevens Canyon Park by way of Foothill Boulevard and Stevens Canyon Road.

The Plan retains the open space character of the Stevens Creek Flood Plain between the reservoir and Stevens Creek Boulevard, ~~but~~ with the intent is not to build to plan for an urban trail system. ~~with an asphalt hiking and bicycling path.~~

Several land purchases should be made to preserve the open space of the flood plain. To allow for flexible future use, the Plan includes a list of uses ranging from very passive extension of the City's Naturalist Program to active use involving expansion of the two golf courses.

The Stocklmeir property is uniquely suited to be a joint open space and historic preservation site. A decision on buying the property will be triggered either by the owner's request to develop the property or to dedicate it for open space or by a direct request of the community. If the community found that it would be too expensive to buy the property or cost too much to maintain it over a long period, the property would remain in private hands. Since most of the property is in the natural flood plain, its residential development potential is limited to a small area around the existing homesite that is outside the natural flood plain.

~~The rest of the properties proposed for purchase will be listed in the City's Capital Improvements Program.~~ The open space acquisition and public trail easement through the 150-acre Kaiser Property south of Linda Vista Park will come about when the property is proposed for development and City review begins.

Policy 5-36: Open Space and Trail Linkages

Work to ~~acquire~~ provide the open space lands and trail linkages described in Figure S-5-E,F,G.

Strategy:

Develop a City trail plan which links major employment centers, the Heart of the City and major open space areas.

Private Open Space Resources

There are several private open space and recreational activity businesses in Cupertino's planning area, including golf courses, riding stables, and clubs offering tennis and swimming. They are valuable to the community because they provide services that are not traditionally provided by the public sector on City or regional parklands. Land use controls and incentives should be incorporated into public policy so these operations can continue.

Policy 5-37: Private Open Space and Recreational Facilities

Encourage the continued existence and profitability of private open space and recreation facilities through incentive and development controls.

Utility system power line corridors in the City's foothills are another category of privately controlled open space. Deer and other animals use these as migration paths.

Policy 5-38: Public Use of Private Open Space

Seek cooperation from private land owners for public use of private open space.

Neighborhood Open Space Program

Cupertino's neighborhood parks system serves the active and passive recreation needs of its residents. ~~The park system will be developed based on these policies.~~

The City of Cupertino recognizes that a well-managed open space and park system enhances the quality of life for its citizens. The existence of open space provides a visual break from development, and park facilities provide people with the opportunity and encouragement to pursue recreational activities improving both their physical and mental well-being.

Changing economic conditions have created a need for new approaches to the acquisition of open space. Escalating land costs and reductions in local funding mean the City needs to identify alternatives to the traditional purchase of parkland, such as, long-term joint-use agreements and development dedications.

In any case, the City of Cupertino shall continue its commitment to a responsive and attractive open space and park system by adhering to the following policies.

Policy 5-39: Park Acreage

Provide park land ~~space~~ equal to a minimum of three acres for each 1,000 residents.

Policy 5-40: Park Walking Distance

Ensure that each household is within a half mile walk of the park and that the route is reasonably free of physical barriers including streets with heavy traffic.

Policy 5-41: Park Minimum Acreage

Plan parks to be at least 3.5 acres for flexibility of use. The acquisition and development of parks less than 3.5 acres may be considered according to the following priorities:

High Priority - Designated neighborhoods which have no park or recreation areas.

Moderate Priority - Designated neighborhoods which have school grounds and no park land.

Low Priority - Designated neighborhoods which have park or recreation areas less than three acres per 1,000 residents.

Accessibility of residents to parks should be considered in determining priorities.

Policy 5-42: Park Design

Design parks informally to make use flexible and long-term maintenance costs low.

Policy 5-43: Park Street Access

Ensure that parks are bounded by public streets. When possible, re-evaluate parks that meet minimum size requirements to see if it is feasible to install a perimeter road.

Policy 5-44: ~~Memorial Park Development~~ Neighborhood N

~~Limit the community parks program to the continued development of Memorial Park with the exception of a possible acquisition of part of a surplus high school site.~~

New residential development in Neighborhood N should provide a public neighborhood park based upon the City's park dedication ordinance. Subsequently the boundaries of neighborhoods N and E1 should be redrawn to reflect the additional park site.

Policy 5-45: Neighborhoods J-1, J-2, K

Make the final determination regarding a neighborhood park site after the completion of Cupertino Union School District's Sedgwick School master plan.

Definition of Need

Some sub-neighborhoods are isolated by physical barriers, including land forms, railroad tracks, or streets with heavy traffic.

Accessibility is a major consideration in neighborhood parks. Figure 5-I shows the half-mile service area radius for neighborhood parks. The shaded service areas show physical barriers, such as freeways, railroad tracks, or stream beds. The diagram does not show streets with heavy traffic. These busy streets may discourage some people, especially young children, from visiting parks. For example, many parents would not allow their pre-school children to cross De Anza Boulevard or Stevens Creek Boulevard alone to go to a park.

Implementation

Cupertino will not have the money to buy enough park land to meet the minimum standard of three acres for each 1,000 residents in all neighborhoods. Table 5-E and ~~Figure 5-H~~ show an acquisition strategy that stretches limited money by using school sites, expanding existing parks, and taking advantage of park dedication requirements for major new developments.

~~School enrollment is declining in Cupertino and the Cupertino School District is evaluating closing schools. Residents depend on neighborhood schools for open space and, less often, as space for organized group play. Plan strategy is to acquire school sites as they become available in neighborhoods that do not have enough park land. Table 5-D inventories school sites. The third column shows the potential for school closure. The fourth column in Table 5-E identifies school sites that the City is thinking of acquiring for parks if the school is declared surplus. Surplus school sites not listed in Table 5-E will not be considered for purchase by the City for parks.~~

Policy 5-46: ~~Park Acquisition Program~~

Recognize Table 5-E as the City's neighborhood park acquisition program. ~~Funding and timing priorities are listed in the Capital Improvement Program.~~

Policy 5-46 Park and Open Space Acquisition Program

The City's park acquisition is defined by Table 5-E. The Acquisition Program is based upon three ~~four~~ broad acquisition objectives:

1. Complete the ~~Neighborhood~~ Parks Acquisition Program.
2. Maintain an adequate inventory of sports fields.
3. ~~Purchase a site for a community center~~
4. Retain creek site and other natural open space areas identified in the Open Space section of the General Plan.

The plan is a policy document that will be used yearly to help in preparing the updated Capital Improvements Program. The plan is subject to revision depending upon the availability of funds and subsequent actions of the Cupertino Union School District regarding the disposition of surplus school sites.

Policy 5-47 New Residential Development in Non-residential Areas

New residential development in non-residential areas shall provide park and recreational space and facilities based on the following considerations:

1. The need for dedication of public park land and the provision of private recreational space and facilities shall be determined when a master plan is submitted for the development, based on the following criteria:
 - a. Where feasible, public park space should be provided as opposed to private. Active park areas are encouraged which will serve the community need. Passive areas are acceptable, when appropriate to an urban setting. Features could include paths, benches, water features, picnic tables, public art, trees and gardens. They should be oriented toward the street or an activity area where it is easily accessible to the public. Passive areas deemed inaccessible or unlikely to be used by the public should not be credited toward park dedication. Providing public trail connections may be given partial credit toward park dedication.
 - b. New residential developments should be encouraged to blend their recreational facilities into the community at large.
 - c. Park fees should be collected based on a formula which considers the extent to which the public and/or private park space and facilities meet the park need.

Policy 5-48: Recreational Facilities

The City of Cupertino recognizes the public benefit derived from a recreational gymnasium and swimming pool and should such a facility be developed, the City shall pursue all possible partnerships, including school districts, non-profit organizations and the corporate community as a means of funding and operating the facilities.

Area of Greatest Deficiency: This relates to park acquisitions that satisfy the space and access goals of the parks program. For example, the City should acquire land first within areas of greatest need. The most important priority is that lands are not preempted for other uses. It may be advisable to delay buying land in unincorporated pockets of County land within City limits until it becomes clear that the land will probably be annexed. This point is less important because property tax has become less significant as a source of support for parks.

Explanation of the Funding Code Descriptions In Table 5-E

General Fund: Money collected through property tax, sales tax, and other sources not specifically designated for another purpose.

Park Dedication: These fees are collected in residential subdivision development. Generally, these funds should be spent in the neighborhood in which they were collected.

Federal and State Grants: The City has used federal and state grants to help acquire park land and build on the land and hopes to continue to do so. Money has come from the two State Bond Acts of 1970's and four in the 1980's 1976, state Urban Open Space moneys, a Department of Housing and Urban Development grant for the McClellan Ranch Park, and the Housing and Community Development Act.

Proceeds from Surplus Park Land Sales: On occasion, when there is too much park land in a neighborhood, or when park design is awkward, some land may be sold to a residential developer and the proceeds used to buy land in a neighborhood that needs parks.

Other Agency Participation: As it has in the past, Cupertino will work with the Santa Clara Valley Water District, school districts, the Midpeninsula Regional Open Space District and other governmental bodies to acquire park land jointly.

Voluntary Donation or Gift: The City is sometimes offered park land along with development or an owner may want to bequeath land to the city for a park. Landowners may also wish to dedicate land to the City with the understanding that they continue to own the property for their lifetimes.

Expenditure of Funds for Development and Construction of Facilities

~~Because money is limited and there is pressure to close schools, land acquisition should have priority over park development. Lawns may be installed to a limited degree on some park sites depending on available money. Cupertino has completed a senior center in Memorial Park, and, as of 1988, plans to build a community center in the park as well. The City will continue to use schools to conduct its teen drop-in program and other recreation programs. If the Lincoln School site is going to be closed, the City may want to go ahead with acquisition to take advantage of an excellent multi-purpose room.~~

Table 5-B. 1977 and Projected 1990 Population for Cupertino Urban Service Area.

Neighborhood	1977	1990
Park Unit	Pop. Estimate	Pop. Projection
A-1	770	700
A-2	1,235	1,400
B (w/o San Jose)	3,375	2,890
B (w San Jose)	1,810	1,445
C	170	1,535
E-1	2,510	2,820
E-2	4,110	4,215
F-1	700	590
F-2	5,730	5,570
G	885	720
H-1	1,885	1,830
H-2*	2,740	2,435
I-1	3,615	4,480
I-2*	1,845	1,565
J-1	805	690
J-2	990	700
K	4,455	3,735
L-1	985	1,980
L-2	3,935	3,700
M	5	5
N	0	510
O*	1,645	1,635
P-1*	1,150	1,180
P-2*	1,925	1,745
TOTAL	47,275	48,075

* Neighborhoods outside LAFCO 1978 Sphere of Influence for Cupertino; 1977 population of these neighborhoods was 12,105.

Table 5-C. Neighborhood Park Land Need Analysis for 1990 Urban Service Area Population.

Neighborhood Service Areas	1990 1977 Inventory Population	Park Need* (Acres)	1990 Park Supply Status Based on 1977 Inventory Surplus/Deficit				Park	Neighborhood 1990
				(Acres)	Numeric	% Need		
E-1	3,520	10.6	Varian Pk.	6.2	-4.3	59%		A-1 and
and C	7,270	21.8	Linda Vista Pk.	11.0(1)	-10.8	50%		A-2, B
	4,215	12.6	Monta Vista Pk.	4.2	-8.4	33%		E-2
	590	1.8			1.8	0		F-1
	5,570	16.7	Memorial Pk.	22.2	5.5	133%		F-2
	720	2.2	Somerset Pk.	1.7	-0.5	77%		G
H-1 and H-2	4,265	12	Jollyman Pk.	3.2	-9.6	25%		I-1 and I-
2	6,045	18	Wilson Pk.	5.2	-12.8	29%		J-1, J-2
and K	5,125	15.4	Rancho(2)	1.9	-13.5	12%		L-1
	1,980	5.9			5.9	0		L-2
	3,700	11.1	Portal Pk.	4.1	-7	37%		N
	510	1.5			1.5	0		O
	1,635	4.9			4.9	0		P-1
	1,180	3.5	Three Oaks	5.1	1.9	154%		P-2
	1,745	5.2			-5.2	0		
								TOTALS
	48,070	144.4		66.8				

* Based on 3 acres/1000 Population
portion of park site unusable due to steep terrain
2) Rancho Rinconada Recreation District

1) Large

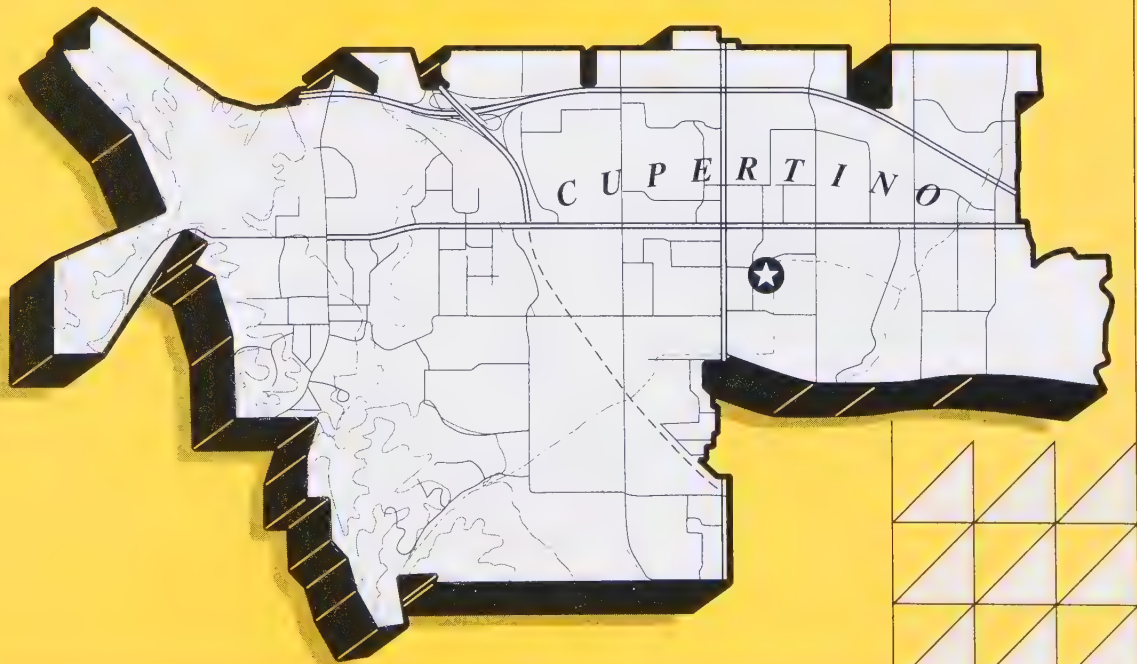
Table 5-D. School Site Inventory (Elementary, Junior High, and High School).

Neighborhood Service Area	School Sites	Operational Status/Type	Total Acres	Usable Acres
A-1 and B-1	Stevens Creek	XXX/E	10	5.3
A-2, B and C	Lincoln	XXX/E	10	6.6
	Kennedy	XXXX/JH	25	14.2
	Regnart	XXX/E	9.5	6.2
	Monta Vista	XXXX/SH	29.2	15.8
E-2	Monta Vista	X/E	97	3.6
F-1	No School Sites			
F-2	Garden Gate	XXXX/E	10	4.6
G	No School Sites			
H-1 and H-2	Faria	XXXX/E	9.5	5.4
	Jollyman	XXX/E	10.5	7.9
I-1 and I-2	Wilson	X/E	10	7.1
	Eaton	XXX/E	10	7.8
	Older	XXX/E	13	6.1
J-1, J-2 and K	Sedgwick	X/E	8.8	4.5
	Doyle	XXX/E	9.3	5.8
	Hyde	XXXX/JH	14.5	9.5
	Cupertino	XXXX/SH	31	16
L-1	No School Sites			
L-2	Portal/Nan Allen	XXXX/E	11	4.8
	Collins	XXX/JH	17.9	6.5
N	No School Sites			
N	No School Sites			
P-1	No School Sites			
P-2	Hoover	XXX/E	10.8	6.5
TOTALS			259.7	144.2
Status Codes:	XXXX	Closure Unlikely		
	XXX	Closure Possible		
	XX	Closure Likely		
	X	Closed to General Enrollment; to remain in inventory for specialized use		
	X	Closed, to be sold		

Table 5-E. Proposed Park Land Acquisition Program.

Area	Population	Future Demand (Acres)	1982 Supply (Acres)	1990 Supply (Acres)	Proposed Purchase (Acres)	Cost of Purchase (\$k)	Total Inventory	Future Ratio (ac/1000)	Notes
A-1/E-1	2617	7.85	11.6	11.6			11.6	4.43	
F-1/F-2	6286	18.86	40.6	40.6			40.6	6.46	
G	715	2.15	1	1			1	1.4	1
N	1180	3.54							2
Subtotal	10798	32.4	53.2	53.2	0	0	53.2	4.93	
A-2/B/C	6949	20.85	66.3	66.3			66.3	9.54	
E-2	4271	12.81	6.2	6.2	7.9	691.25	14.1	3.3	3
H-1/H-2	3795	11.39	17.1	9.2	11.4	3990.00	20.6	5.43	4
O	1642	4.93							5
P-1	1168	3.5	3.4	3.4			3.4	2.91	
P-2	1733	5.2	6.5		4.86	1701.00	4.86	2.8	6
Subtotal	19558	58.68	99.5	85.1	24.16	\$6,382.25	109.26	5.59	
I-1/I-1	5678	17.03	29.3	18.2	3.2	1120.00	21.4	3.77	7
J-1/J-2/K	5170	15.51	30	25.5	4	1400.00	29.5	5.71	8
L-1/L-2	5367	16.1	15.1	15.1			15.1	2.81	
M									
Subtotal	16215	48.64	74.4	58.8	7.2	\$2,520.00	66	4.07	
Total	46571	139.7	227.1	197.1	31.36	\$8,902.25	228.46	4.91	

- 1) Land not available for acquisition in neighborhood G
- 2) Park land will be provided privately in neighborhood N
- 3) 7.9 acres of natural open space will be acquired (4.9 Stocklemer, 3.0 Simms) adjacent to Stevens Creek per existing open space plan
- 4) Purchase 11.5 acres to provide sports field and community center site
- 5) Park land in neighborhood O will not be acquired because of close proximity to other parks
- 6) 4.86 acres will be acquired on the Hoover site
- 7) 3.2 acres of Wilson turf will be acquired to retain youth fields
- 8) 4 acres of the Sedgwick site will be purchased for youth fields and neighborhood park space



Public Health and Safety



INSTITUTE OF ENVIRONMENTAL
STUDIES LIBRARY

PERIODICALS

UNIVERSITY OF CALIFORNIA



Introduction

The purpose of this element is to develop ways to be sure that it is reasonably safe to live and work in Cupertino. It shows potential threats to life and property from nature, including earthquakes, floods, wildfires, and landslides; and from human carelessness, including urban fires and failures of water storage; as well as more subtle hazards such as long-term exposure to excessive noise and crime encouraged by misjudgments in land planning and building design.

There is no such thing as a risk-free environment; there is only an acceptable level of risk. The question to be answered is "how safe is safe enough?" This is a subjective question. It would be ideal to be conservative and get rid of as much risk as possible, but local government must try to set realistic standards within today's economic and social limits.

Seismic and Geologic Hazard

The City is seismically very active. The mountains and lower foothills of Cupertino are crossed by the San Andreas Fault, which moves from side to side; and its two splinter faults, the Sargent-Berrocal and Monta Vista fault systems, which move up and down. Figure 6-A shows the two categories of fault displacement. The San Andreas and the Sargent-Berrocal fault systems are in the mountains of Cupertino's planning area. The Monta Vista Fault follows the line between the valley floor and the hillsides where urban development has taken place. This fault is potentially active, meaning it has not ruptured within the past 11,000 years. The potential always exists, and must be considered when reviewing urban development.

Ground shaking is the greatest hazard in an earthquake. Earthquake intensity is measured by two scales. First, the Richter Magnitude, which measures the total energy of an earthquake as determined by a seismograph, an instrument that records the vibrations of the earth. Second, the Modified Mercalli Intensity Scale, a system that measures the earthquake's intensity based on assessing damage and personal reaction to the earthquake. Table 6-A shows the general comparisons between the two scales.

A "maximum probable" earthquake on the San Andreas and Monta Vista faults could cause considerable damage depending on distance and whether the land is bedrock or soils deposited by flowing water.

Earthquake Probability

The time necessary for maximum probable earthquakes to occur again on a given fault are guesses based on present and past activity, the amount of displacement of rock formations of different geologic ages along the fault tract, and the amount of strain accumulation now measured across it. Estimates on potentially active faults such as the Sargent-Berrocal and Monta Vista are even less accurate than the estimate for active faults such as the San Andreas.

Table 6-B estimates the maximum earthquake magnitude and recurrence intervals of maximum probable earthquakes for fault systems that affect Cupertino. There is not enough information to estimate probable recurrence of a maximum earthquake on the Sargent-Berrocal and Monta Vista Faults. The recurrence interval on the San Andreas fault is 50 to 200 years; the last maximum earthquake was in 1906. Each year that passes without a maximum earthquake means that an earthquake is statistically more likely to happen within any year.

Table 6-A. General Comparison Between Earthquake Magnitude and the Earthquake Effects Due to Ground Shaking.

Earthquake Category	Richter Mag.	Modified Mercalli Intensity Scale* (After Houser, 1970)		Damage To Structure
Minor	2.00	I	Detected only by sensitive instruments	No Damage
		II	Felt by few persons at rest, esp. on upper floors; delicate suspended objects may swing	
	3.00	III	Felt noticeably indoors, but not always recognized as an earthquake; standing cars rock slightly, vibration like passing trucks	
	4.00	IV	Felt indoors by many, outdoors by a few; at night, some awaken; dishes, windows, doors disturbed; cars rock noticeably	Architectural Damage
		V	Felt by most people; some breakage of dishes, windows and plaster; disturbance to tall objects	
Moderate	5.00	VI	Felt by all; many are frightened and run outdoors; falling plaster and chimneys; damage small	
	5.3	VII	Everybody runs outdoors. Damage to buildings varies depending on quality of construction; noticed by drivers of cars	
		6.00	VIII	Panel walls thrown out of frames; fall of walls, monuments and chimneys; sand and mud ejected; drivers of cars disturbed.
Major	6.9	IX	Building shifted off foundations, cracked, thrown out of plumb; ground cracked, underground pipes broken; serious damage to reservoirs/embankments	Total Destruction
	7.00	X	Most masonry and frame structures destroyed; ground cracked; rails bent slightly; landslides	
	7.7	XI	Few structures remain standing; bridges destroyed; fissures in ground; pipes broken; landslides; rails bent	
Great	8.00	XII	Damage total; waves seen on ground surface; lines of sight and level distorted; objects thrown into the air; large rock masses displaced	

* Subjective measure of ground shaking; not engineering measure of ground acceleration

Table 6-B. Active and Potentially Active Faults and Their Earthquake Characteristics.

	Causative Faults	Distance From De Anza/SCB Intersection	Maximum Historic Quake Magnitude	Maximum Probable Quake Magnitude	Est. Recurrence Interval of Max. Prob. Earthquake
San Andreas System	San Andreas	5.5 Miles	8.3 (Richter) (Last event 1906)	8.3 (Richter)	50-100 Years
	Hayward	10 Miles (Last event 1868)	7.0+ (Richter)	7.0+ (Richter)	10-100 Years
	Calaveras	14 Miles	6.0+ (Richter)	7.0+ (Richter)	10-100 Years
Sargent-Berrocal System	Berrocal	3.5 Miles	3.7-5.0 (Richter)	6.5-7.0 (Richter)	Insufficient Data
	Monta Vista	2 Miles	2.0-3.0 (Richter)	6.5-7.0 (Richter)	Insufficient Data

Cupertino is divided into 13 geologic/seismic hazard zones. Figure 6-D shows the zones and describes the specific hazards that could happen within each zone. The hazard map and table will be used to determine which future development projects must undergo geologic review and the degree of detail of each review.

Geologic Hazards

Landslides are the greatest geologic hazards to the foothills and low mountains in the planning area. Landslides can move earth up or down. The sliding of a slope is the normal geologic process that widens valleys and flattens slopes. The rate ranges from rapid rock falls to very slow soil and bedrock creep. Landslides are caused by inter-related natural factors such as weak soil and rock over hillsides made steeper by rapid stream erosion, adverse geologic structure, ground water levels, and high rainfall rates. Landslides can be caused by improper grading, excessive irrigation, removal of natural vegetation, and altering surface and sub-surface drainage.

Figure 6-E shows landslide deposits within Cupertino. Geologic mapping in the hillsides shows that landslide deposits cover as much as 20 to 30 percent of the hillsides in the planning area. Landslides range from small, shallow deposits made up of soil and weak bedrock materials to large, deep landslides involving a large amount of bedrock.

It's nearly impossible to know the long-term stability of a landslide deposit. Old deposits are the most difficult to judge. Experience shows that old landslides are more far more likely to move again than areas that have not had landslides before. Areas in these old landslides that are next to steep, new stream channels are more likely to have new landsliding than areas further from the new channels. This would be especially true with severe shaking during a major earthquake on any of the three faults in Cupertino. The historic account of the 1906 earthquake shows many landslides throughout the Santa Cruz Mountains. Some of these were catastrophic, causing loss of life, personal injury, and severe damage to buildings.

Landslides are expected along the higher portions of Stevens Creek embankments on the valley floor, confined to local sites along the stream channel extending from the front of the hillsides across the valley floor. The hazard can be reduced significantly by restricting building at the base and top of the embankments.

Acceptable Level of Risk

Land use and building design standards must relate to the degree of geologic and seismic hazards in the zone in which a proposed project would be built so that an acceptable level of risk can be assigned. Table 6-D shows an acceptable level of risk for seven land use categories. The four levels of acceptable risk range from extremely low to ordinary. Extremely low risk is assigned to highly critical structures such as a large dam and vital public utility facilities. An ordinary risk category is assigned to buildings such as single-family houses, warehouses, and farm buildings. The table also shows the possible additional cost of measures to reduce risk and identifies the level of protection for life and property.

Land use in the extremely low risk category must achieve maximum safety. For example, Stevens Creek Reservoir must be designed to remain totally functional during the worst possible earthquake. Those improvements must be made at any cost; there is no set percentage of cost associated with structural safety improvements. Ordinary risk activities will cost about 1 to 2 percent more for the desired level of safety.

Figure 6-F shows vital facilities that must remain intact during the worst probable earthquake on any fault system in Cupertino. Most of these facilities are owned by private companies or public agencies beyond direct City control. The map's purpose is to bring the owners' attention to the need to evaluate the facilities in terms of their potential to disrupt service or cause hazard to Cupertino residents. Cupertino City Hall is a communications center for natural disasters including earthquakes and will be important in coordinating emergency services. The City must be sure that critical parts of the water system can withstand a maximum earthquake so they can be used for drinking water and water to fight fires.

Table 6-E shows a policy position on the amount of technical evaluation needed to be sure that hazards in new developments are reduced to an acceptable level of risk based on land use. Critical facilities in Cupertino's planning area should be evaluated and modified structurally to withstand a maximum earthquake.

Table 6-C. Explanations: Geologic and Seismic Hazards Map of the Cupertino Planning Area.

Geologic Terrain Unit	General Geologic/Seismic Hazards Within Terrain Unit	Hazard Zone Map Symbol	Specific Hazard To Be Considered In Haz. Zone
VALLEY FLOOR: Nearly flat, urbanized valley floor; steep walls of Stevens Creek Canyon; low rolling foothills area near St. Joseph Seminary and Monta Vista substation	GROUND SHAKING - Moderate to locally severe VIII to IX intensity for max. probable event (8.3M) on San Andreas Fault. X to XII intensity within 1000 ft. and VII to VIII intensities at distance > 1000 ft. from max. probable event on Monta Vista Fault.	VF - 1/2/3	<ul style="list-style-type: none"> - Ground Shaking - Ground Failure - Ground Rupture (Monta Vista Fault) - Flood Inundation (Calabazas Creek)
	GROUND FAILURE - Moderate to high landslide potential along steep Stevens Creek canyon walls; Moderate-high potential lateral spreading and ground lurching, Stevens Creek Canyon walls, liquefaction potential low-moderate	VF - 4	<ul style="list-style-type: none"> - Ground Shaking - Ground Failure (landsliding, lurching, lateral spreading)
	GROUND RUPTURE - Moderate potential along and w/in 300ft., Monta Vista Fault trace	VF - 5	<ul style="list-style-type: none"> - Ground Shaking - Ground Failure (liquefaction) - Flood Inundation - Ground Rupture (Monta Vista Fault)
	FLOOD INUNDATION - Moderate-high potential along Stevens Creek under seismic or non-seismic conditions, and along Calabazas Creek under non-seismic conditions	VF - 6	<ul style="list-style-type: none"> - Ground Shaking - Ground Rupture
FOOTHILLS - Gentle to steep, partially urbanized hillside area located west of Valley Floor, generally east of Montebello Ridge	GROUND SHAKING - Moderate to locally severe VIII to IX intensity for max. probable event (8.3M) on San Andreas Fault. X to XII intensity within 2000 ft. west of Monta Vista Fault for max. probable event (7.0M)	F - 1	<ul style="list-style-type: none"> - Ground Shaking - Ground Failure (landsliding)
	GROUND FAILURE - Moderate to high landslide potential under seismic/non-seismic conditions for slopes > 15%; ground lurching, fracturing within 2000 ft. west of Monta Vista Fault trace during maximum probable earthquake.	F - 2	<ul style="list-style-type: none"> - Ground Shaking - Ground Failure - Ground Rupture
	GROUND RUPTURE - Moderate potential along and w/in 300ft. east and 600 ft. west of Monta Vista Fault and Berrocal Fault	F - 3	<ul style="list-style-type: none"> - Ground Shaking - Ground Failure - Ground Rupture
	FLOOD INUNDATION - Moderate-high potential along Stevens Creek under seismic or non-seismic conditions	F - 4 (Same as VF - 5)	<ul style="list-style-type: none"> - Ground Shaking - Ground Failure - Flood Inundation
MOUNTAINS - Moderate to steep hill- side areas of Montebello Ridge and Santa Cruz Mountains	GROUND SHAKING - Moderate to locally severe X to XII intensity for max. probable event (8.3M) on San Andreas Fault. X to XII intensity within 2000 ft. from Berrocal Fault for max. probable event (7.0M)	M - 1	<ul style="list-style-type: none"> - Ground Shaking - Ground Failure (landsliding)
	GROUND FAILURE - Moderate to high landslide potential under seismic/non-seismic conditions for slopes > 15%; ground lurching, fracturing within 2000 ft. west of Berrocal and San Andreas Fault	M - 2	<ul style="list-style-type: none"> - Ground Shaking - Ground Failure (lurching, fracturing)
	GROUND RUPTURE - High potential w/in 600 ft. of San Andreas Fault trace; Moderate potential 600' west of Berrocal Fault trace	M - 3	<ul style="list-style-type: none"> - Ground Shaking - Ground Failure - Ground Rupture

Table 6-D. Acceptable Exposure to Risk Related to Various Land Uses.

Land uses and structural types are arranged below according to the level of exposure to acceptable risk appropriate to each group; the lowest level of exposure to acceptable risk should be allowed for Group 1 and the highest level of exposure to acceptable risk for Group 7.

Acceptable Exposure To Risk	Land Use Group	Extra Project Cost To Reduce Risk To Acceptable Level
EXTREMELY LOW	Group 1	VULNERABLE STRUCTURES (nuclear reactors, large dams, plants manufacturing/ storing hazardous materials)
	Group 2	VITAL PUBLIC UTILITIES, (electrical transmission interties/substations, regional water pipelines, treatment plants, gas mains)
	Group 3	COMMUNICATION/TRANSPORTATION (airports, telephones, bridges, freeways, evac. routes)
		SMALL WATER RETENTION STRUCTURES
		EMERGENCY CENTERS (hospitals, fire/police stations, post-earthquake aide stations, schools City Hall, De Anza College)
MODERATELY LOW	Group 4	INVOLUNTARY OCCUPANCY FACILITIES (schools, prisons, convalescent and nursing homes)
		HIGH OCCUPANCY BUILDINGS (theaters, hotels, large office/ apartment bldgs.)
	Group 5	PUBLIC UTILITIES, (electrical feeder routes, water supply turnout lines, sewage lines)
		FACILITIES IMPORTANT TO LOCAL ECONOMY
ORDINARY RISK LEVEL	Group 6	MINOR TRANSPORTATION (arterials and parkways)
		LOW-MODERATE OCCUPANCY BUILDINGS (small apartment bldgs., single-fam. resid., motels, small commercial/office bldgs.)
	Group 7	VERY LOW OCCUPANCY BUILDINGS (warehouses, farm structures)
		OPEN SPACE & RECREATION AREAS (farm land, landfills, wildlife areas)

Table 6-E. Technical Investigations Required to Design Structures Based Upon Acceptable Level of Risk for Various Land Use Activities.

Hazard Zone Map Symbol		
Land Use Activity (Table 6-D)	VF 1 2 3 5 6	F 1 2 3 4 M 1 2 3 VF 4
	Evaluations Required	Evaluations Required
Groups 1 to 4	Uniform Bldg. Code (UBC) Soils Seismic Hazard	Uniform Bldg. Code (UBC) Soils Seismic Hazard Geology
Groups 5 to 7	Uniform Bldg. Code (UBC) Soils	Uniform Bldg. Code (UBC) Soils Geology

Description Of Technical Evaluations

UBC	1976 Edition, Uniform Building Code
Soils	Soils and foundation investigation to determine ability of local soil conditions to support structures
Geology	Determine subsurface structure to analyze potential faults, ground water conditions and slope stability
Seismic Hazard	Detailed soils/structural evaluation to certify adequacy of normal UBC earthquake regulations or to recommend more stringent measures

Policy Recommendations

This section outlines actions the City should take to reduce the risk of injury or property loss caused by natural disasters. Regulating new development offers the greatest rewards in risk reduction because while it is difficult to improve existing development, it is much easier to locate and design new buildings to achieve this goal.

Policy 6-1: Seismic/Geologic Review Process

Adopt and use a formal seismic/geologic review process to evaluate new development proposals all over the City.

Strategies

1. **Acceptable Level of Risk.** Use the table on acceptable level of risk to identify reasonable levels of risk for land uses. The table gives general structural risk-reducing design criteria for each land group.
2. **Geotechnical and Structural Analysis.** Use Table 6-E of the Seismic Safety Background Report to find the necessary geotechnical and structural analysis based on the proposed location of a development in a specific hazard zone.

3. **Earthquake-Resistant Design Techniques.** Give a high priority to using new earthquake-resistant design techniques in the design and structural engineering of buildings.
4. **Residential Construction Standards Upgrade.** Upgrade construction standards for non-engineered residences to reduce earthquake damage, limiting them to minor construction techniques and components that do not significantly raise costs. Examples are additional bracing for garage openings of two-story and split-level homes and increased first story bracing in multiple-family residences over parking garages.
5. **Geotechnical Review Procedure.** Adopt a geotechnical review procedure that incorporates these concerns into the development review process.

It is not practical to improve buildings to incorporate revised earthquake safety standards. Luckily, most buildings in Cupertino are new and were constructed under a building code that includes components and designs that resist ground shaking.

Still, structures identified as “critical facilities” should be re-evaluated, especially those in the high-hazard zones. Many seismic safety evaluations have been completed. Cupertino’s schools comply with legal standards. The Santa Clara Valley Water District found that Stevens Creek Reservoir’s location and construction method were too risky to allow the dam to continue to hold water until an additional safety review was complete. The state Department of Transportation is looking at freeway overcrossings to see how resistant they are to ground shaking.

Policy 6-2: Evaluation of Critical City Facilities

~~Evaluate City facilities on the Critical Facilities Map to reduce risks consistent with Table 6-D and encourage agencies in the planning area to do the same.~~

Strategy

1. ~~**Structural Engineer to Evaluate Emergency Equipment.** Retain a structural engineer to evaluate the City Hall Emergency Operating Center and the structures housing the City’s emergency equipment and to make design recommendations to be sure this structure will function after a maximum probable earthquake on any of the three faults in Cupertino.~~

Evaluating non-critical public or private buildings is too expensive but City government should educate residents, employers, and business owners to protect their property and reduce risk of injury.

Policy 6-3: Public Education on Structural Seismic Safety

~~Start an~~ Continue the public educational program to help residents reduce earthquake hazards.

Strategies

1. **Covenant on Seismic Risk.** Continue the City program that requires developers to record a covenant to tell future residents in high-risk areas about the risk and inform them that more information is in City Hall records. This is in addition to the state requirement that information on the geological report is recorded on the face of the subdivision map.
2. **Earthquake Safety Flyer.** Continue to Publish and distribute a general informational booklet-flyer made up of instructions on minimizing earthquake risks for owners of homes and businesses and distribute it with the Cupertino Scene. Tip examples include tying down gas appliances, installing an appropriate tool next to gas turn-off valves, finding a safe location for family members to gather during an earthquake, recommending earthquake drills, and advising residents to maintain first-aid supplies, food, and drinking water.
3. Publish and promote emergency preparedness activities and drills.
4. Encourage community leaders/owners of buildings with dependent populations to prepare their buildings and clients for emergencies through emergency planning, training, and drills.
5. Actively translate emergency preparedness materials and distribute to appropriate multi-lingual populations.
6. Create and maintain a computerized calling program for dependent populations to alert them of an emergency and provide them safety instructions related to the emergency.
7. **Activate Emergency Operating Center.** Activate the emergency operating center at City Hall and the Service Center as quickly as possible after an emergency to be the communication center in time of emergency.
8. Continue to train neighborhood groups on methods of emergency response.

Fire Hazard

Fire Services

The City of Cupertino's fire fighting and emergency medical services are provided by the Central Fire Protection District. Three fire stations are located in the City of Cupertino. Insert Exhibit (1)

The District also provides similar services for The Town of Los Gatos, Monte Sereno, and a portion of the City of Saratoga. Besides fire protection, the District provides fire prevention activities, educational programs, cardio pulmonary resuscitation and first aid certification classes. Also earthquake preparedness training.

The current and projected operating budget allows the District to perform these functions satisfactorily. The City and District goal is to maintain a high level of service which is measured by response times. It is the policy of the District to respond to all emergency calls in under five minutes. Insert Exhibit (1) The fire stations are strategically distributed throughout the city to reduce response times.

Fire Hazards on the Urbanized Valley Floor

People who live and work in Cupertino are not subject to a high risk of fire. The City has a well-managed fire protection service, buildings are relatively new and there is a strong code enforcement program and adequate water service. Nevertheless, there is room to reduce fire hazards in some geographical areas. Fire risk in cities depends on building construction techniques, materials and heights, response time of fire equipment and firefighters, and water availability.

In urban areas, the most serious concern is fires in high-rise buildings, multiple family dwellings and commercial and industrial structures containing highly combustible or toxic materials.

Relationship of Building Design and Materials to Fire Risk

Cupertino minimizes fire hazards by regulating building construction and site planning through the Uniform Fire Code and the Uniform Building Code. All land within City limits is designated Fire Zone 3 under the Uniform Fire Code. This is the least restrictive of the fire zones and is used by suburbs in which most of the buildings are constructed to modern standards and separated so that fire is not likely to spread from one to another. Cupertino's large commercial and industrial buildings are designed to separate large areas to prevent the spread of fire. The City also requires automatic sprinkler and fire detection systems, further reducing risks. ~~Fire Zone 1, the most restrictive category, is used for central business districts in older cities.~~

The City and the fire district periodically inspect commercial and industrial buildings but single-family homes do not require inspection. Smoke alarms are required in new homes. ~~and the City has considered requiring them when homes are resold.~~

Accessibility

A radius of a mile and a half is generally the ideal service area for a fire station, but a large number of commercial and industrial buildings may require a radius of three-quarters of a mile while a rural environment of single-family and two-family houses may permit a radius of three to four miles or more. Figure ~~6-G~~ shows the distances from ~~three~~ four Central Fire District Stations and the Rainbow-Blaney Avenue station in San Jose. As shown, the majority of the community is within the 1-1/2 mile radius. These distances predict potential response time, which may change due to traffic congestion and other problems. The ideal service area lines are used to show the relative degree of accessibility to various areas in Cupertino.

One of the major goals of fire service is to reduce response time, but the City's policy of discouraging commute traffic from driving through neighborhoods may delay response time because it is difficult for fire equipment to use direct routes. Private security systems for planned residential communities may also delay response time and must be looked at carefully.

The City of Cupertino has a good safety record in terms of fire protection and a minimum of fire losses. This record is reflected in the City's excellent fire insurance rating of Class 3. This low level of risk is the combined result of the high proportion of new construction which meets current Uniform Building Code standards, and an efficient fire protection service.

Increased calls for fire service and traffic congestion can erode the Fire Departments critical response times. To compensate the District will adjust and/or expand staff and equipment in high areas of service demand and continue its program of placing emergency traffic preemption controls on key traffic signals.

People who live in the foothills and mountains of Cupertino's planning area are most at risk from fire. The City is not directly involved in fire fighting in the mountains but fire safety in the Montebello Ridge and Stevens Canyon area does affect Cupertino directly. Major fires would hurt the Stevens Creek watershed, would increase flooding potential by silting up the stream beds, and would reduce recreation.

Fire Hazards in the Foothills and Mountains

The vegetative cover, the degree of slope, and critical fire weather are the three natural factors upon which the California Division of Forestry classifies the severity of potential fire in the foothills. Development in the foothills is typically scattered and low density, making fire protection difficult. The amount of hazard to life and property is affected not only by the fire itself but by road access for evacuation, the number of available fire fighters, the availability of water to fight the fire, and the effectiveness of building codes and inspection of developments in fire hazard areas.

There are about 16 square miles of land ~~and 100 houses~~ in the mountains of the Cupertino planning area. Living in the rural hinterlands have become very popular. As of late, any increase in density, increases fire exposure, risks. In 1992, all properties above the 10% slope line are within a hazardous fire area and as such are required to have fire retardant roofing (Class A) and continuously clear any brush away from their structures. They also may be required to place fire sprinklers within the structure. Hazardous Fire Area is land which is covered with grass, grain brush or forest, which is inaccessible and if a fire were to start would be abnormally difficult to suppress. Under county zoning regulations, the number of houses would peak at between 112 and 190. ~~Considering the size of the land, only a few houses are exposed to fire hazard.~~

Most of the mountainous land is owned either by the Midpeninsula Regional Open Space District or the Santa Clara County Parks System. When the parks are fully active, many people could be exposed to fire risk.

Building Codes

In 1992, all properties above the 10% slope line are designated within a hazardous fire area. Hazardous Fire Area is land which is covered with grass, grain brush or forest, which is inaccessible and if a fire were to start would be abnormally difficult to suppress. Fire retardant roofing (Class A) is required on all new construction. Also, the property owners are required to continuously clear any brush away from their structures. When new residential structures are built, they may also be required to place fire sprinklers within the structure. Cupertino and Santa Clara County use a The Uniform Fire Code and is used to designate certain the areas in their jurisdiction as hazardous fire areas. The code regulates building materials and the closeness of combustible plants to a structure. The County Fire Marshal and Central Fire District regulate activities in fire hazard areas, including closing an area to the public. Neither the City nor The County Fire Marshal currently responds on a complaint basis in the hazardous fire area. An inspection program is being designed for both weed abatement and brush clearance. The goal date for implementation is December 1993. ~~has an effective inspection program under the fire code. The lack of funding may eventually require people who live in rural fire areas to monitor their own property and monitor activities of their neighbors that may jeopardized their properties.~~

Road Access

From a safety perspective, access is a key component of a fire hazard. Fire fighting equipment must be able to reach the fire and likewise assurance must be given to residents and visitors that they can escape from fire. Fire equipment needs roads which are passable, less than 15% grade, which have a turning radius minimum of 42 feet or greater radius and places to turn around.

Public road access is severely limited, all emergency access roads run through private property and these property owners and the problem is worsened by a decision by the Santa Clara County Board of Supervisors to scrap an emergency road access planning program. Property owners are asked to act independently or to form groups to maintain fire access roads. More restrictive zoning has cut down on development so much that it is not feasible to expand the planned fire road to form links. Santa Clara County lists the Montebello Road/Stevens Canyon area as the fourth highest risk in the county.

A fire-trail gravel surface road links Montebello Road and the Palo Alto Sphere of Influence to the bottom of Stevens Canyon. The MidPeninsula Regional Open Space District is considering extending the trail to get rid of a quarter-mile gap in the fire trail system to make patrolling easier. The district is working with the California Department of Fish and Game to get approval to improve and rebuild the former fire trail and to make access continuous. A fire trail extends from Skyline Boulevard through on Charcoal Road and down to Stevens Canyon. Segments of that road are not paved and are extremely steep, so standard passenger cars cannot be used.

Road accessibility in the lower foothills is easier. The City requires an all-weather surface, private emergency access connection between public streets within Lindy Canyon and Regnart Canyon. If the Inspiration Heights area develops, the system of public streets and private fire access roads will be extended within the Kaiser property north of Stevens Creek. Private roads are less likely to meet the access standards. There are usually no long term guarantees of maintainance. Typically, private roads have lower construction standards than public roads.

Dead end roads, especially long dead end roads which give access to many portions of Regnart Road, and Stevens Canyon areas are risky. Alternate access routes are provided via private emergency access routes.

Water Supply on Montebello Ridge and in Stevens Canyon

There are no water systems in the Montebello Road and Stevens Canyon area with the exception of Stevens Creek itself. The county requires each homesite to be served by a 10,000 5,000 gallon tank. It is theoretically possible to have water storage systems that are jointly owned and operated and possible to reduce the required amount of water if there is an adequate water main distribution for all homes sharing the joint facility. The County Fire Chief's Assn. recommends that structures larger than 1,600 sq. ft. located in a remote fire hazard area have 10,000 gallons of stored water. The county policy suggests that its land development regulations include that standard. There is now no apparent support for increasing the tank standard and there is no commitment of county resources to inspect the minimal 5,000-gallon tanks.

Water Supply for Foothill Regions Within the Urban Service Area

All development in the Urban Service Area must be served by a water system that complies with City standards for household and firefighting use. In the short term, a few developed areas, such as lots in the upper reach of Regnart Canyon and a few areas in Inspiration Heights, have an inadequate water system. In the long term, these areas will receive a better supply of water for fighting fires as the City's water system expands along with new development and capital improvements projects.

Water supply for Foothill Regions

The Reglin Mutual Water System services approximately 120 families in the Fire Hazard area. There is no guarantee that these homeowners will maintain the supply and equipment. The Board of Directors have indicated that one of the existing water tanks are in need of replacement. Annexation from one of the adjoining water companies is necessary.

Having enough water is important in fighting fires. ~~Figure 6 H shows private and public water systems that serve Cupertino. The San Jose Water Company and the California Water Service supply the new areas of the City so the water lines and distribution systems are adequate to meet domestic and fire flow needs. Four water retailers serve the City of Cupertino, including: Cupertino Municipal Water, California Water, Reglin Mutual Water System and San Jose Water Company. The San Jose/California Water companies have adequate water lines and distribution systems to meet the flow needs. However, although they meet today's needs, neither private water system is required to maintain adequate fire flows under its agreements with the City and fire agencies. The City and the fire district are looking into the possibility of new legislation that would require minimum fire flow capabilities to be maintained by water service providers.~~

The City bought its domestic water system in 1960. It consisted of old distribution lines and pumping facilities. The utility has modernized lines mostly through new development, but there are areas in the City that must be upgraded to meet fire-flow requirements. ~~Figure 6 H shows system deficiencies.~~

Acceptable Level of Risk

~~The definition of acceptable level of risk is based on the amount of money allocated to protect people and property from fire. The insurance rating system can be used to define acceptable level of risk. Fire insurance rates in Cupertino are based on the American Insurance Administration grading schedule. Table 6 F shows the factors and their values. Table 6 G correlates the points of deficiency with insurance rate classifications. A city with a Class 1 designation would have a low level of risk and low rates while a Class 10 city would have high risk and high rates.~~

~~Cupertino is a Class 4 city. It would be conceivable that the City could achieve a Class 1 rating with its maximum protection of life and lower insurance rates. However, it would be very expensive to augment the water supply, increase the number of fire stations and their staffing, and place greater restrictions on buildings. Fire insurance premiums would not change that drastically anyway, so it would make economic sense for the city and property owners not to spend the money needed to upgrade to Class 1.~~

Table 6-F. Total Possible Points of Deficiency and Relative Value of Items in Grading Schedule.

Item	Relative Values	% Of Total
Water Supply	1,700	34
Fire Department	1,500	30
Fire Alarm	550	11
Fire Prevention	350	7
Building Department	200	4
Structural Conditions	700	14
Climatic/Unusual Conditions		
Divergence between first two items		
Total	5,000	100

Table 6-G. Points of Deficiency Which Determine Class for Major Items in Grading Schedule.

Class	Water Supply	Fire Department	Fire Alarm	Fire Prevention	Building Department	Structural Conditions
1	0-170	0-150	0-55	0-35	0-20	0-70
2	171-340	151-300	56-110	36-70	21-40	71-140
3	341-510	301-450	111-165	71-105	41-60	141-210
4	511-680	451-600	166-220	106-140	61-80	210-280
5	681-850	601-750	221-275	141-175	81-100	281-330
6	851-1020	751-900	276-330	176-210	101-120	331-420
7	1021-1190	901-1050	331-385	211-245	121-140	421-490
8	1191-1360	1051-1260	386-440	246-250	141-160	491-560
9	1361-1530	1261-1350	441-495	251-315	161-180	561-630
10	1531-1700	1351-1500	496-550	316-350	181-200	631-700

Class 1 0 to 500 Points of Deficiency
Class 2 501 to 1000 Points of Deficiency
Class 3 1001 to 1500 Points of Deficiency
Class 4 1501 to 2000 Points of Deficiency
Class 5 2001 to 2300 Points of Deficiency
Class 6 2301 to 3000 Points of Deficiency
Class 7 3001 to 3500 Points of Deficiency
Class 8 3501 to 4000 Points of Deficiency
Class 9 4001 to 4500 Points of Deficiency
Class 10 4501 and Over Points of Deficiency

This General Plan element should encourage Santa Clara County to take greater steps to reduce the risk of a major fire within the Cupertino Planning Area. Although county government has not adequately put its fire prevention policies into effect on land development, the Board of Supervisors has agreed with a volunteer fire department to provide fire protection for the Montebello Ridge and Stevens Canyon area. The group will supply service between October and May when the California State Division of Forestry station at Stevens Creek Reservoir is unstaffed. The Central Fire District will give administrative support and the Division of Forestry will train volunteers. The Board of Supervisors will finance insurance.

The Fire District has extensive fire and hazardous materials mutual aid plans with adjacent cities, the County and State agencies. Mutual aid agreements with surrounding jurisdictions augment the City's fire response capabilities.

The City of Cupertino has taken a number of steps to combat fire hazards including adoption of the State 1991 Fire Code, and has declared most of the Santa Cruz Mountain range as hazardous fire areas. Cupertino has adopted roofing standards designed to improve fire safety in hazardous areas. The City coordinates an early review process with the City Fire District to incorporate fire presentation methods. The City reviews building plans and requires use of fire-resistant materials. The City coordinates with/and encourages the County of Santa Clara to uphold the weed abatement program.

Policy Recommendations

Policy 6-4: County Fire Hazard Reduction

Encourage the county to put into effect the fire reduction policies in the County Public Safety Element.

Strategies

Note: (Strategies completed)

- ~~1. **Circulation System for Montebello Ridge/Stevens Canyon.** Ask the Board of Supervisors to allocate money to allow the County Public Works Dept. to design a comprehensive circulation system for Montebello Ridge and upper Stevens Canyon. It should include future alignment for public, private, and fire roads and should include a way to develop a regulation to coordinate the development to insure safe access before new homes are built. It should also provide for public maintenance or publicly regulated private maintenance for private roads and fire roads.~~
- ~~2. **Water Tank Capacity Increase.** Actively pursue, through the City Council, the increase of minimum water storage capacity for homes larger than 1,600 sq. ft. from 5,000 gallons to 10,000 gallons and monitor efforts to inspect these water tanks. This is a part of the County Public Safety Element but has not been put into effect.~~

Policies and programs that ensure adequate access and water supply, along with current effective regulations on fire-retardant building materials and clearance of vegetation around homes, would help protect hillside residents and property.

Policy 6-5: Fuel Management to Reduce Fire Hazard

Encourage the MidPeninsula Open Space District and the County Parks Department to continue efforts in fuel management to reduce fire hazard.

Policy 6-6: Green Fire Breaks

Encourage the MidPeninsula Open Space District to consider "green" fire break uses for open space lands. This could include commercial timber harvesting.

Residents of Cupertino's Urban Service Area have an acceptable level of fire protection. Improvements can be made to increase safety in specific areas.

Policy 6-7: Master Cupertino Fire Plan

~~Prepare a master fire plan for Cupertino. Outline a fire protection program to achieve a high degree of fire protection with minimum public and private cost. Use the plan to find the break point in the level of service versus cost equation. The plan should establish the best level of fire protection for each land use and should analyze the emphasis on preventing fires as opposed to fighting fires.~~

Policy 6-7: Residential Fire Sprinklers

Continue to require fire sprinklers in new residential construction located in hillside areas and on flag lots.

Policy 6-8: Hillside Access Routes

Require new hillside development to have frequent grade breaks in access routes to ensure a timely response of fire personnel.

Policy 6-9: Hillside Road Upgrades

Require new hillside development to upgrade existing access roads to meet Fire Code and City Standards.

Policy 6-10: Early Project Review

Involve the Central Fire Protection District in the early design stage of all projects requiring public review to assure fire department input and plan modifications as needed.

Policy 6-11: Growth Coopertation

Encourage cooperation between water utility companies and the Central Fire District in order to keep water systems in pace with growth and firefighting service needs.

Policy 12 : Fire Fighting Upgrade Needs

Encourage utilities to consider Central Fire District's firefighting needs when upgrading water systems.

Policy 6-13: Roadway Design

Attempt to involve the Central Fire District in the design of public roadways for review and comment.
Attempt to ensure that roadways have frequent median breaks for timely access to properties.

Policy 6-14: Fire Prevention

Continue to promote fire prevention through city initiated public education programs either through the government television channel and/or the Cupertino Scene.

Policy 6-15: Multi-Story Building Fire Risks

Recognize that multi-story buildings of any land use type increases fire exposure risks. Ensure that adequate fire protection is built into the design and require on-site fire suppression materials and equipment as required for safety of the community.

Policy 6-16: Residential Fire Sprinkler Ordinance

Consider adopting a residential fire sprinkler Ordinance. This will reduce fire flows & thus reduce the need for firefighting personnel and equipment.

Policy 6-17: Commercial and Industrial Fire Protection Guidelines

Coordinate with the Central Fire District in considering new guidelines for fire protection for Commercial & Industrial uses.

Policy 6-18: Private Residential Entry Gates

Discourage the use of private residential entry gates which act as a barrier to emergency service personnel.

Policy 6-19: Dead-End Street Access

Allow public use of private roadways during an emergency for hillside subdivisions that have dead-end public streets longer than 1,000 ft. or find a secondary means of access.

Policy 6-20: Smoke Detectors

Continue to require smoke detectors in new residential construction and continue to support fire protection agencies' education of homeowners on installation of smoke detectors. Use the Cupertino Scene to publicize fire hazards and correction methods.

Policy 6-23:

Continue to act as a liaison between P.G. & E. and the community in providing energy efficiency information.

Consider converting city vehicles to natural gas or electricity.

Flood Hazard

Floods can result from large rainstorms, failure of water-storage facilities, and from a water basin created by a landslide.

Flood Hazard from Rainstorms

Floods caused by large rainstorms are the most common and the least risky. The vast watersheds in the Santa Cruz Mountain Range feed into four major streambeds that cross the City: Permanente Creek, Stevens Creek, Regnart Creek, and Calabazas Creek. Figure 6-I shows streambed locations and the extent of a 100-year flood, the flood than has a 1 percent chance of happening during any given year.

The 100-year flood is the standard design flood accepted by the City, the Santa Clara Valley Water District, and federal agencies. There is more information on this subject in the section on acceptable level of risk.

The remainder of Cupertino is protected from flooding by the concrete sub-surface storm drain system. It was designed for the largest storm that could happen once in three years and was redesigned in 1977 for a 10-year flood. All new development will have the larger system. In the meantime, the key parts of the older system will be updated through the long-term capital improvements program.

The City has not studied in detail the carrying capacity of the system for larger floods, but in general a moderate storm, a 10-year to 40-year flood, will be contained within the curbs and gutters of the streets and will flow into major storm channels and creek beds designed to handle a 100-year flood. Heavier storms may cause some flooding of yards, but it would be extremely unlikely for water to enter buildings. A few areas in Cupertino, including Old Monta Vista, and older areas next to the foothills, are not protected by storm water systems. It is difficult, if not impossible, to predict the location and extent of flooding in smaller isolated areas. In any case, the risk to life is virtually non-existent.

Heavy rainstorms in the foothills and mountains of the planning area generally do not cause flooding problems. A report sponsored by the Divisions of Mines and Geology showed that all streambeds can carry a 200-year flood.

Landslides and mudslides are the main problems caused by heavy rainstorms. These happen when heavy sheet flows of water expose cut-and-fill slopes. Unless the slopes are protected by erosion control methods, there will be landslides and mudslides, which silt up streambeds.

Flood Hazard from Failure of Water-Storage Facilities

Figure 6-J shows the location and size of water-storage facilities in the planning area. It describes the flooding if Stevens Creek Reservoir should fail instantaneously. The flooded area is based on the maximum storage capacity of 3,700 acre feet. ~~The reservoir is being operated at a reduced level of 1,200 acre feet until a dam safety study is completed, so the flooded area would be smaller. The water district does not have an flooding plan prepared for the smaller storage capacity, but that limit was imposed to remove the probability of dam failure in the event of a maximum probable earthquake on the San Andreas Fault.~~ This reservoir dam was strengthened in 1987, allowing the dam to operate at its capacity.

The storage tanks shown on Figure 6-J are considered a minimal risk, but there is a possibility of injury and property loss for homes located near these tanks if they were to fail. Owners of such tanks are not required under law to prepare flooding maps and none have been prepared by water utilities. The San Jose Water Company has installed flexible couplings and check valves in the 20-million-gallon Regnart Road Reservoir to minimize valve and water line failure during an earthquake. The City's two water tanks, each holding 2 million gallons, do not have a check valve or flexible couplings. The 8-to-10 acre-foot Voss Avenue Pond was determined to be safe by an engineering consultant.

Flood Hazard From Landslides

A landslide could occur within a steep ravine in the foothill fringe in the more mountainous terrain outside the Urban Service Area boundary. If there is a landslide in a ravine serving a relatively large watershed, water could collect behind the landslide debris and eventually collapse the debris wall, resulting in a wall of water cascading down the ravine, injuring people or damaging property. The watersheds in this area are relatively small, so the risk of floods caused by landslides is minimal. There is a massive ancient landslide west of Stevens Creek Reservoir but it would not be a flood hazard or result in an unstable pond.

Acceptable Level of Risk

There is low risk from flooding in Cupertino and its planning area. There is an extremely low risk from flooding if Stevens Creek Reservoir were to fail. Sometimes rain-swollen flood channels cause drowning when people fall into them or venture out onto them in boats.

It is possible to design flood protection for a 500 to 1,000-year flood, but it would be extremely expensive in relation to the property's land-use activity. For example, it would ~~be foolish~~ not be cost effective to construct a flood works to protect grazing or agricultural land next to a stream. ~~and slightly less foolish to protect agricultural land.~~ It is prudent to protect a housing development and essential to protect a critical facility such as a hospital.

Policy Recommendations

The Santa Clara Valley Water District and the City are actively involved in programs to minimize the risk of flooding. The City developed a flood plain land use policy for the non-urbanized reach of Stevens Creek south of Stevens Creek Boulevard. This ensures that the area flooded in a 100-year flood would be preserved and protects the natural streamside environment.

The City and the district developed an unusual flood management program for the reach of Stevens Creek between Interstate 280 and Stevens Creek Boulevard. The strategy is to keep the natural environment of Stevens Creek even though structural improvements would be necessary to protect properties absolutely from a 100-year flood. The majority of people living in the Phar Lap Drive and Creston neighborhoods agreed to accept a higher level of flooding risk with the understanding that risks would be partially lowered by using the Federal Flood Insurance Administration Program and installing a flood warning system. The strategy also includes building a new conduit on Interstate 280 to reduce the barrier effect of the freeway itself, which was built across the natural flood plain.

Policy 6-29: No New Construction in Flood Plains

Adopt stringent land use and building code requirements to prevent new construction in already urbanized flood hazard areas recognized by the Federal Flood Insurance Administrator. For example, the finished floors of new construction must be higher than the water level projected for the 100-year flood. A description of flood zone regulations and a map of potential flood hazard areas will be published in the Cupertino Scene.

Policy 6-30: Prohibit Dwellings in Natural Flood Plain

Continue the policy of prohibiting all forms of habitable development in natural flood plains. This includes prohibiting fill materials and obstructions that may increase flood potential downstream or modify natural streambanks.

Removing sediment from drains is one of the major expenses of the City and the water district. The sediment is caused by natural erosion as well as erosion induced by development, mostly in the hillsides. The City's Hillside Development Ordinance requires private hillside construction to install erosion control measures on all cut-and-fill slopes including roadways, driveways, and house pads. Sediment increases flood risks and clogs the natural percolation function of streambeds, which replenish the groundwater table.

Policy 6-31: Restrict Hillside Grading

Continue to restrict the extent and timing of hillside grading operations. Allow lot and street grading from April through October. Require a performance bond to be submitted by a grading permit applicant before grading starts during the remaining months. The amount of the bond will guarantee the repair of erosion damage. All graded slopes must be planted as soon as practical after grading is complete.

Most water-storage facilities shown in Figure 6-J are designed to withstand ground shaking. If the magnitude of ground shaking was not previously assessed or if the water facilities were designed before new standards, the City should re-evaluate the design if the facility is publicly owned or strongly suggest that the owners evaluate the structural integrity based on the maximum possible earthquake on the San Andreas fault, including an evaluation of the possible area of flooding.

Policy 6-32: Evaluate City Water-Storage Facilities

Program necessary funds to evaluate the structural integrity of municipal water-storage facilities, including distribution line connections and any necessary repairs. Possible flood speeds and flooded areas should be included. The study consultant will confer with the City's geological consultant to determine the geology and the maximum expected ground shaking intensities of the tank site.

Noise Pollution

Freedom from excessive noise is a major factor in maintaining a high degree of quality of life. The noise environment is an accumulation of many different sources ranging from common machinery to the major source, street and freeway traffic. Table 6-H lists some common noise sources and their sound levels.

The degree to which noise is irritating depends on a variety of factors, some independent of the noise source itself. Time of day, background sound level, the listener's activity, and surrounding land use can all influence the degree to which a particular sound is perceived as annoying. Value judgments also enter into tolerance for urban sound levels. Emergency sirens and loud lawnmowers are tolerated by most people because they represent

necessary actions, public safety and neighborhood upkeep. However, loud noises from cars with defective or modified mufflers are usually greeted as annoyances.

Overall noise levels seem to be increasing despite efforts to identify and regulate noise sources. Truly effective solutions to the noise problem will probably require lifestyle changes and tradeoffs between freedom from government intervention in personal lives and the convenience and economy of using noisy devices. It's not possible to control all city noise sources but some regulation is needed to offset negative results of excessive noise.

~~Figures 6-K and 6-L are noise contour maps that focus on the transportation network and its noise impacts on the community. They are described in L_{dn} (average day/night sound levels) and L_{10} (the sound levels exceeded 10 percent of the time). The L_{10} map shows the less continuous, more noticeable, intermittent noises characterizing traffic sounds in residential neighborhoods.~~

Effect of Noise on People

Noise can affect the physical, social, psychological, and economic well-being of community residents. The effects can be intensified for residences, schools and parks adjacent to major noise sources. Excessive noise can result in temporary or chronic hearing loss and physiologic damage to the inner ear. Noise can disturb privacy, worsen mood, disturb relaxation, and interrupt sleep. It can interfere with speech and confuse other auditory signals. Diminished worker efficiency and economic loss can result if noise disrupts the performance of complicated work tasks. All of these stresses are reasons for trying to control the effects of urban noise. The next section outlines and discusses some measures that can be put into effect by the City aimed at counteracting some of the increasing noise irritations.

Table 6-H. Sound Levels and Loudness of Illustrative Noises in Indoor and Outdoor Environments.

dB(A)	Overall Level (Sound Pressure Level = .0002 Microbar)	Community (Outdoor)	Home or Industry (Indoor)	Loudness (Human Judgment of diff. sound levels)
130		Military Jet Aircraft Takeoff w/Afterburner From Carrier @ 50 ft. (130)		
120	UNCOMFORTABLY LOUD		Oxygen Torch (121)	120dB(A) 32 times as loud
		Turbofan Aircraft Takeoff @ 200 ft. (118)		
110		Jet Flyover @ 1000 ft. (103) Boeing 707 @ 6000 ft. before landing (108)	Riveting Machine (110) Rock-n-roll Band (108)	110dB(A) 16 times as loud
100	VERY LOUD	Helicopter @ 100 ft. (100) Power Mower (96) Boeing 737 @ 6000 ft. before landing (97)	Newspaper Press (97)	100dB(A) 8 times as loud
90		Motorcycle @ 25ft. (90) Car Wash @ 20 ft. (89) Prop Plane flyover @ 1k' (88)		90dB(A) 4 times as loud
		Diesel Truck 40mph @ 50' (84) Diesel Train 45mph @ 50' (83) High Urban Ambient (80)	Food Blender (88) Milling Machine (85)	
80		Pass. Car 65mph @ 25ft. (77) Freeway @ 50ft. frm. Pavement Edge (70-82)	Garbage Disposal (80) Living Room Music (76)	80dB(A) 2 times as loud
70	MODERATELY LOUD		TV-Audio, Vac. Clnr. (70) Cash Reg. @ 10' (65-70) Elec. Typwrtr. @ 10' (64) Dishwasher @ 10' (60)	70dB(A)
60		Air Cond. Unit @ 100ft. (60)	Conversation (60)	60dB(A) 1/2 as loud
50	QUIET	Large Transformer @ 100' (50)		50dB(A) 1/4 as loud
		Bird Calls (44) Lower Limit		
40		Urban Ambient Sound (40) (dBA Scale Interrupted)		40dB(A) 1/8 as loud
10	JUST AUDIBLE			
0	Threshold of Hearing			

Policy Recommendations Framework

This section gives a policy framework for guiding future land use and urban design decisions and contains a system of control and abatement measures to protect residents from exposure to excessive or unacceptable noise levels. Policy objectives will be identified and analyzed according to land-use compatibility, noise sources related to and not related to transportation, and will include discussion of severe effect of ~~Kaiser Permanente~~ quarry truck traffic. ~~on Foothill and Stevens Creek Boulevards.~~

Acceptable noises do not disturb commonly recognized activities, such as conversation and rest. Various studies have established maximum interior noise levels that will insure undisturbed conversation and relaxation. Exterior noise environments are more difficult to analyze and control. The ability to speak at close range in a normal voice seems to be a reasonable standard with which to judge outside noises. This section ~~allows~~ outlines techniques to help protect interior and exterior environments from disruption by city noise ~~for of activities basic to~~ comfortable daily living.

Land Use Compatibility

Goal A: Strive to ensure a compatible noise environment for all existing and future land uses.

Many undesirable noise effects can be reduced or avoided if noise conditions are considered when assigning uses to specific land parcels. Noise cannot and should not be the primary factor considered in land use analysis, but the City should strive to match land uses to compatible noise levels.

Compatibility may be achieved by locating land use types outside of designated noise impact areas or by requiring modifications including setbacks, noise walls, building insulation, or landscaping.

The Cupertino Municipal Code, Section 10, outlines the maximum noise levels on receiving properties based upon land use types.

Policy 6-33: Land Use Decision Evaluation

Use Figures 6-K, ~~6-L~~ H, and ~~6-M~~ N and Cupertino Municipal Code to evaluate land use decisions

Strategies

1. **Noise Review of New Development.** Review the proximity of new or significantly remodeled housing to the traffic noise corridor by using the Leq map and review the results of previous noise standards to see if the standards can be complied with through conventional construction practices. If there is not enough information, the staff may ask the developer to provide an acoustical analysis along with the application. The applicant may appeal staff recommendations to the Planning Commission.
2. ~~Noise Standard Adoption.~~ Evaluate adopting a noise standard that assesses and limits the level of less frequent, more intrusive noise.

Transportation Noise

Goal B: Work to reduce the noise impact of major streets and freeways upon Cupertino.

Traffic noise is the greatest contributor to noise pollution in Cupertino and one of the most difficult to control through local effort. Cupertino is crossed by two major freeways and ~~nine~~ three major arterial streets.

Cupertino is fortunate that significant portions of Highways 85 and 280 are recessed because this helps lessen noise in the surrounding neighborhoods. Freeway noise is at a constant but subdued level, less of a direct threat to neighbors. Commuters use local north-south streets heavily and greatly increase local traffic congestion, air pollution, and noise.

~~The problem is worsened by the incomplete status of State Route 85, which will direct much of the through commute traffic away from streets, if it is ever completed. Unfortunately, further extension of Route 85 may increase noise above acceptable limits for many of the homes along the right of way. Careful consideration of potential noise generated by the extension is absolutely necessary for future freeway design and should go along with more stringent California and federal noise standards to lessen noise.~~

The impacts of heavy traffic on local roads may be reduced when traffic is diverted to Highway 85 upon its completion. However, the addition of traffic on Highway 85 will increase noise levels for residences along the right of way. When the roadway opens, the residences will experience a significant increase over existing noise levels because the residents are not currently experiencing roadway noise from this location. Noise impact analyses prepared for the proposed highway indicate that typical noise levels may increase 4 to 10 decibels. These increases include the mitigation measures of a depressed roadway and noise barriers. None of the noise levels is predicted to exceed 64 dBA's if 12 foot barriers are used.

About ~~2,000~~ 2,460 of Cupertino's ~~16,000~~ 17,000 homes are exposed to excessive noise ~~potential from freeways and major streets.~~ levels greater than 60 decibels.

Table 6-I. Noise Exposure Index (Ldn, 60 dB and above).

	Existing		Future		Total	
	Units	Population	Units	Population	Units	Population
R-1	1500 / <u>1550</u>	4380 / <u>4154</u>	300 / <u>340</u>	880 / <u>911</u>	1800 / <u>1890</u>	5260 / <u>5065</u>
R-2 R-3	500 / <u>560</u>	1460 / <u>1500</u>	10 / <u>10</u>	26 / <u>26</u>	1460 / <u>570</u>	1526 / <u>1526</u>
TOTAL	2000 / <u>2110</u>	5840 / <u>5654</u>	300 / <u>350</u>	880 / <u>937</u>	1800 / <u>2460</u>	6720 / <u>6591</u>

- * Future impacted areas result from Highway 85 extension to Saratoga Sunnyvale Road and from Bollinger Road extension to Stelling Road

NOTE: Population multiplier = 2.92 2.68 persons/household based upon the Association of Bay Area Governments Projections 90'.

When we compare the Municipal Code allowed maximum noise levels to the existing noise conditions (Figure 6-K), it is determined that all receptors are currently experiencing noise levels above the maximum, based upon land use type and time period.

Any new development in these areas will be required to build and incorporate design strategies outlined in the policies of this document to meet the maximum allowed internal and external noise maximums.

Policy 6-34: Freeway Design and Neighborhood Noise

Be sure that design and improvement of roads along the West Valley Transportation Corridor are designed and improved in a way that minimizes neighborhood noise.

Policy 6-35: Support Stricter State Noise Laws

Continue to support enactment of stricter state laws on noise emissions from new motor vehicles and enforce existing street laws on noise emissions.

Local Streets/Neighborhood Protection

Neighborhood streets are especially sensitive to noise abuse. When considering neighborhood noise policies, a balance must be achieved between the resident's need to drive and the need to keep emergency vehicle response time to a minimum. ~~must be balanced against the need for safe and quiet neighborhoods when policies on streets are considered.~~

Policy 6-36: Neighborhood Need Priority

Continue to review the needs of residents for convenience and safety and make them a priority over the convenient movement of commute or through traffic where practical.

Policy 6-37: Solutions to Street Abuse

Continue to evaluate solutions to discourage abuse of local streets through modified street design. Examples include meandering streets, diverters, landscape islands, street closures, and widened parking strips.

1. **Local Improvement Districts.** Use of modified street design may require funding through the creation of local improvement districts.

Train and Aircraft Noise

Trains and aircraft do not contribute much to noise in Cupertino. Aircraft flying into Moffett Field Naval Air Station are restricted to the northeasterly corner of Cupertino, affecting some residents of the Rancho Rinconada neighborhood. Cupertino's ~~only one~~ railroad line passes through the Monta Vista neighborhood and connects with the Kaiser Permanente Plant in the Western foothills. ~~There are only two trains a day but if Kaiser products are shipped more often by rail, people living along the Southern Pacific line would suffer from more noise pollution because~~ is one train daily which occurs usually in the early evening hours. Noise levels associated with the trains are approximately 85-90 decibels at a distance of 50 ft. from the track for a period of two minutes. There are no noise protection devices along the rail corridor and if increases in rail activity occurs sound walls or other mitigation may be required to place a deed restriction on the property notifying future property owners that the noise standard will be exceeded.

Truck Traffic

The most crucial example of traffic noise intrusion on the quality of neighborhood life is the effect of heavy duty truck trips to and from the Kaiser Permanente Plant and Voss Rd. quarry located in the western foothills on people who live near Stevens Creek Boulevard and Foothill Boulevard. There are about 1,500 trips each working day, which generates ~~ing up to~~ 90 decibel noise levels next to the road.

When trucks speed up, slow down, or use their high-powered brakes on the unusually steep road, the truck noise problem is worsened. ~~A detailed analysis of this problem is in the Noise Element Working Paper Appendix. Figure 6-N displays the results of an analysis of truck noise and attempts to define only the noise from Kaiser trucks.~~

Policy 6-38: Noise Improvement by Restricting Trucks

Continue to work toward improving the noise environment along Foothill Boulevard by restricting quarry truck traffic ~~to the Kaiser Permanente Cement Plant~~, especially during late evening and early morning hours. It is preferable that the restrictions be voluntary. Encourage alternative to truck transport, specifically rail, when feasible.

A study prepared by professional acoustical engineering consultants suggested a series of measures to diminish noise for homes along the truck traffic corridor. Reducing truck travel and carrying out these measures could give some relief to the residents most severely affected.

Policy 6-39: Reduction of Noise from Kaiser Permanente Trucks

Work to carry out noise mitigation measures listed in the Edward L. Pack and Associates report (County of Santa Clara) to diminish noise from Kaiser Permanente truck traffic for homes near Foothill and Stevens Creek Boulevards.

Strategies

~~1. Pamphlet on Noise Mitigation. Compile and distribute a pamphlet on noise mitigation measures to people who live in the area affected by the Kaiser truck noise.~~

~~— Include an overview of noise laws and telephone numbers of agencies to contact with complaints.~~

1. Noise Notification in Deeds. Require, as a condition of development approval, that deeds of property in the area affected by the noise contain notices informing buyers of the noise problem.

Non-Transportation Noise Sources

Goal C: Protect residential areas as much as possible from intrusive noise generated by sources other than traffic.

Noises not generated by traffic are typically stationary and/or sporadic. They have a relatively minor affect compared to traffic noise, but noises such as permanent equipment (refrigeration or air conditioning units or other related pumps), barking dogs and rattling of garbage cans when people are trying to sleep can be annoying and disruptive. Complete regulation of these noises is unlikely, but the City can work to protect neighborhoods from excessive noise and require compliance with the noise standard during the evening and early morning, when noise levels tend to be lower.

Short term noise sources are also a noise disruption activity. Temporary activities such as construction can often last for several months and generate a substantial number of complaints. Some are unavoidable, but new advances in muffling devices for construction equipment can reduce noise from jackhammers, portable compressors, and generators. The days and hours of construction operations are controlled by City Ordinance. Policies are provided for noise levels that exceed the maximum decibel allowance. In several cases building construction is stopped during evenings and weekends. ~~Construction can also disrupt neighborhoods. Expecting this, the City has required.~~ In several cases that building construction is stopped during evenings and weekends.

Adjoining Dissimilar Land Uses

People who live near commercial loading docks often complain of late night and early morning disturbances. Similarly, those who live near industrial areas are often annoyed by sounds from chemical storage plants, ~~air conditioning equipment,~~ and the general manufacturing process. It's easy to anticipate these problems but it's hard to resolve them in the development review process because economic interests and property rights must be balanced.

Policy 2-23 of the Land Use/Community Character Element of this plan gives a strategy for design controls to ensure a more peaceful co-existence between neighboring different land uses. These should be studied carefully at the beginning of an commercial or industrial project that will adjoin homes.

Policy 6-40: Commercial Delivery Areas

Be sure new commercial or industrial developments plan their delivery areas so they are away from existing or planned homes.

Policy 6-41: Limit Delivery Hours

Continue active enforcement of Section 10.45 of the Municipal Code limiting commercial and industrial delivery hours adjoining residential uses.

Policy 6-42: Noise Control Techniques

Continue to require analysis and implementation of techniques to control the effects of noise from industrial equipment and processes for projects near homes.

Policy 6-43: Restrict Hours of Construction Work

Continue to restrict non-emergency building construction work near homes during evening, early morning, and weekends.

~~Common Neighborhood Disturbances~~

~~Common household activities are often audible beyond property lines. Barking dogs, parties, lawnmowers, amplified music, and pool equipment are just a few of these.~~

Policy 6-44: Comprehensive Noise Ordinance Development

Develop a comprehensive noise ordinance that gives time restrictions on commercial and industrial deliveries, and establishes procedures for regulating noisy animals, ~~regulates hours for construction,~~
~~and establishes maximum noise levels for common neighborhood disturbances.~~

Noise Attenuation

Goal D: Encourage use of techniques to diminish noise wherever they can produce practical and desirable results.

Interior noise can be best be diminished in the same way homes are insulated against cold. Leaks around doors, windows, vents, or through open fireplace dampers as well as uninsulated exterior walls and lack of seals or weatherstripping increase noise intrusion and can be remedied. Sound is pervasive in cities and it's difficult to control exterior noises.

Different noise control techniques can be used with varying degrees of success. Each site should be evaluated to find the best combination of noise control devices. Here is a summary of common techniques and their uses.

Barriers

Solid noise walls can reduce noise from 1 to 15 decibels or more. Their effectiveness depends on the relative grade of the roadway, the distance of the listener from the center line of the nearest road, placement and height of the noise wall in relation to the source's line of travel, the size and location of the area to be protected, and the frequency of the noise source. The barrier is more successful with higher-pitched noise and is usually more effective when located close to the source or to the listener, assuming that both are below the top of the barrier. ~~Barriers should be installed to control sound coming around the ends.~~

Noise barriers can be ugly and can wall in or separate neighborhoods. Landscaping is a less expensive and effective way to make the walls more attractive and will also reduce sound reflection from the walls. Evergreen and vines should be planted along the roadway side. Reflection can increase noise levels on the opposite side by as much as 1 to 3 decibels. ~~Evergreens and vines should be planted along the roadway side.~~

Policy 6-45: Noise Wall Requirements

Exercise discretion in requiring noise walls to be sure that all other measures of noise control have been explored and that the noise wall blends with the neighborhood.

Strategy

1. **Special Assessment Districts for Noise Control.** Help form special assessment districts to install noise barriers where single-family homes back up to major streets. Landscape all walls on the street side.

Landscaping and Setbacks

Landscaping and setbacks do not work well in reducing noise. Plants and trees are not dense enough to prevent air flow. Setbacks must be substantial to make a difference in noise. Noise goes down about 3 decibels for heavy traffic and about 6 decibels for light traffic every time the setback from the center line of the road is doubled. This figure, from the Santa Clara County Noise Element, shows the effects on noise of landscaping and setbacks.

Building and Site Design

Building and site design techniques can control noise effectively in new developments or when existing buildings are modified. Sensitive areas can be set back or buffered by buildings, parking, or recreation areas. Homes can use rooms such as kitchens, bathrooms, and garages to buffer the more sensitive bedrooms and living rooms. Buildings should face solid walls onto the noise source and be sure that no vents or other air leaks face the noise source.

Insulating Buildings From Noise

Conventional building practices will achieve noise reductions from adjoining roadways of between 10 and 20 decibels.

This table, from the Santa Clara County Noise Element, shows noise reduction from typical building types.

Table 6-J. Approximate Noise Reduction Achieved by Exterior of Common Structures*.

Bldg. Type	Window Condition	Reduc. of Noise from Outside Source	Max. Exterior Noise level Matched to 45dBA Interior Design Std.
All	Open	10 decibels	55 dBA
Light Frame	Ordinary sash, closed	20 decibels	65 dBA
Masonry	Single pane, closed	25 decibels	70 dBA
Masonry	Double pane, closed	35 decibels	80 dBA

Crime

The cities commitment to public safety encompasses two broad areas of responsibility. First is the direct provision of public safety services and the planning necessary for prevention of crime. The second area is the planning for a safe environment in which the public is not exposed to unnecessary risks to life and property.

The concept of defensible space, popularized in the early 1970s, uses architectural design to create a physical environment that allows the person in it to monitor activities, thereby reducing unacceptable behavior. Cupertino evaluates 70 to 100 development projects a year; these translate into the working and living environment for Cupertino residents. The City ~~should~~ has developed an appreciation of the sociological and psychological effects of the physical environment on human behavior by initiating a Pre-hearing Review meeting. All new projects are reviewed early in the planning process by the Santa Clara County Sheriff's Department for comment on safety issues.

Cupertino has a vary low crime rate which can partially be attributed to project design techniques and achieve community involvement.

An increase in retail activities relates to an increase in thefts and related criminal activity. An increase in growth may increase vehicle traffic which increases the risk of automobile accidents. Both relate to a need for additional officers.

Park Design

People who live next to neighborhood parks have had problems with nuisance and criminal behavior in parks, especially park areas that are not easily visible from the street.

Future park design will include a perimeter road that be surrounded by streets where feasible which would allow neighbors and the police to see the park from all sides. This gives people more control over their neighborhoods. Future park design will take into consideration design techniques to minimize potential vandalism and crime. Figure 6-Q shows the current and proposed design of Three Oaks Park, north of Rainbow Drive. If technical and legal problems can be resolved, a part of the park will be sold to a home builder with the proceeds to be used to buy land in a nearby neighborhood for another park. Parks in other parts of Cupertino should be checked to see if this might work there.

Cupertino's General Plan zoning codes stresses the need for visual privacy protection. This could conflict with the idea of defensible space if privacy design techniques isolate households enough so that people lose the feeling of possession of private and semi-private spaces in a residential development. Design can be used to create social cohesion, important not only for a planned residential community but in single-family detached homes. For example, someone who lives in a single-family home needs assurance that the neighborhood would support his or her effort to question a stranger parked at the curb or to report a strange car that keeps cruising up and down a street. If the resident thinks that other neighbors don't want to get involved or don't care about strangers in the neighborhood, that person would watch out only for his or her own property. Cupertino has actively supported a Neighborhood Awareness Program that offers advice on crime prevention and encourages neighborhood cohesiveness.

Policy 6-46: Neighborhood Awareness Programs

Continue to support the Neighborhood Awareness Program and others intended to help neighborhoods prevent crime through social interaction.

Non-Residential Design for Defensible Space

Using design techniques to prevent crime in non-residential districts is more direct than it is in residential areas. The key is to design buildings to ease police patrol and help community surveillance. Decisions on crime prevention involve tradeoffs between aesthetics and the ease of access for patrol vehicles as well as tradeoffs between privacy and acoustical protection between commercial properties and adjacent homes.

Commercial office and industrial properties designed with interior garden courts with private fenced patios and isolated entrances have more burglaries and robberies than those that are highly visible. Masonry barriers earth mounds and landscaping beds are typically used to isolate parking lot noise in commercial operations. The County Sheriff's Office, which provides police service in Cupertino, believes that these solutions do not increase burglary in adjoining homes.

Policy 6-47: Crime Prevention in Building Design

Consider the relationship between building design and crime prevention in reviewing all developments. Develop criteria with help from the Sheriff's Office to determine the degree to which crime prevention standards should override esthetic concerns.

Policy 6-48: Public Perimeter Roads for Parks

Encircle neighborhood roads with a public road to provide visual accessibility whenever possible.

Policy 6-21:

Recognize fiscal impacts to the County Sheriff and City of Cupertino when approving various land use mixes.

Policy 6-22:

Continue to request County Sheriff review and comment on development applications for security measures.

Disaster Planning

Under state law, cities must prepare an emergency plan to respond to ~~“war-caused”~~ natural and man-made or other disasters that threaten the health or property of their residents. The City’s Emergency Plan mainly establishes an organizational framework to ~~let~~ enable the City plan to prepare for its emergency response activities and to coordinate with county and state agencies. Effective communications is one of the primary objectives of the Emergency Plan.

The Cupertino Emergency Plan

The City’s Emergency Plan ~~depends greatly on the availability of key people once a state of emergency is declared. Typically, only the city manager, department heads, assistant department heads, and some clerical staff members have participated in annual disaster drills. City Hall operates from 8 a.m. to 5 p.m., so it is highly likely that an emergency will occur during non-working hours. Many Cupertino employees do not live in the City, so it is likely that a general emergency such as a major earthquake would delay people from staffing their emergency operation positions.~~ is based upon the states’ Multi-hazard Functional Emergency Plan and uses the Incident Command System as the management structure. Within this organization, the City Manager becomes the Director of Emergency Services when a local emergency is declared. Department Directors of their pre-designated alternates are trained in the role of Operations, Human Services, Finance, or Resources in the Emergency Operation Center, (EOC). There are three parts to the Emergency Plan. The first part is the legal requirements, the second part is the descriptions of the functional responsibilities and checklists of the members of the EOC, and the third part is sample forms, resource lists, and references. The plan is reviewed annually through disaster drills.

~~Policy 6-49: Broaden Emergency Service Training Program~~

~~Broaden the Emergency Service Training Program to include more middle management and non-management employees in future emergency training programs.~~

A large earthquake could isolate Cupertino from major full-service hospitals. City personnel and local physicians will be ill-equipped to meet the emergency needs of residents if a major earthquake strikes.

Policy 6- : Emergency Service Training Program

Continue to train employees annually in disaster preparedness, first-aid and CPR.

All city employees are designated as Disaster Service Workers. As such, they receive training in home preparedness skills and emergency response responsibilities. Additional classes are offered in first aid and CPR, search and rescue and damage assessment. In April, Earthquake Preparedness Month, all employees are reminded of preparedness steps to take at home and at work and participate in a Duck, Cover, and Hold Drill. Staff assigned to the EOC participate in at least one training exercise per year.

Policy 6-50: Shift Emergency Responsibility to the State

~~Join other local cities to lobby the state to shift the responsibility of planning and providing major emergency medical responses in cities to the state government.~~

Strategy:

Encourage businesses to prepare for disasters by having on-site emergency supply containers.

Cupertino planned the construction of an emergency operation center in the City Hall basement for 1980. Emergency diesel generator and telephone equipment is already installed.

Policy 6-33: Emergency Operation Center

~~Incorporate a permanent display system and information update process in the design and operation of the emergency operation center.~~

Continue to annually train all city employees on the operations of the EOC Center.

The Emergency Operation Center is located on the lower floor, rooms C and D, of City Hall. The communications room including Amateur Radio Equipment and the EOC to EOC radio is adjacent to the EOC. The Service Center has an alternate EOC with duplicate communications equipment.

Strategy:

Earthquake Safety Booklet. Continue to publish and distribute a general informational booklet made up of instructions to minimize earthquake risks for home owners and businesses alike. Continue workshops, and preparedness fairs. Provide public information including tips on tying down water heaters, installing turn-off tools next to gas and water valves, finding a safe location for family members, recommending earthquake drills, and advising residents to maintain first-aid supplies, food, and drinking water.

Right after a major emergency, police, fire, and medical services will be spread very thin. Residents must develop self-reliance in first aid and storage of food, water, and other essentials. ~~The last major disaster was the 1906 earthquake, so most Cupertino residents have not experienced a major disaster.~~

Strategies

1. Publish and Promote Emergency Preparedness Activities and Drills. During the month of April, Earthquake Month, publish in the Cupertino Scene preparedness information. Continue programming on Channel 53 that describes preparedness measures and lessons learned from previous disasters. Encourage newspaper coverage of city, school, or neighborhood drills and activities.

2. Community Alert System. Create and maintain a computerized calling program to alert and evacuate neighborhoods in disasters.

Policy 6- : Community Preparedness

Continue to provide training to the community on self preparedness for emergencies.

Policy 6- : Ham Radio Operators

Continue to support the training and cooperation between the city and ham operators to prepare for emergency communications needs.

Immediately following a major emergency, police, fire, and medical services will be spread very thin. Residents are developing self-reliance in first aid and the storage of food, water, and other essentials. The October 17, 1989 Loma Prieta Earthquake motivated many residents to host emergency preparedness presentations in their homes. This service continues to be offered to neighborhoods, businesses, and schools. A Memorandum of Understanding between Cupertino Community Services and the City of Cupertino describes the use of pre-registered and convergent volunteers that will be staged at the Quinlan Community Center. These volunteers are also being trained and integrated into the emergency preparedness program.

Strategies

1. **Dependent Populations.** Encourage leaders/owners of buildings with dependent populations such as day care centers, schools, residential day care, and convalescent homes to prepare their buildings and clients through an emergency planning, training, and drills.
2. **Multi-Lingual Populations.** Actively translate emergency preparedness materials and distribute to appropriate populations.

Cupertino constructed an Emergency Operations Center (EOC) on the lower floor of City Hall. An emergency diesel generator and telephone equipment were installed along with a cooperatively operated amateur radio communication system to supplement publicly-sponsored emergency channels. The E.O.C. to E.O.C. radio at City Hall is duplicated at the Service Center.

Strategies

1. **Activate the Public Information Office.** Activate the Public Information Office either in the Emergency Operations Center or in City Hall as quickly as possible after an emergency.
2. **Develop Neighborhood Response Groups.** Train neighborhood groups to respond to disasters as they request assistance. Assist in neighborhood drills.

Policy 6- : Business Storage Containers for Emergency Supplies (ARKS)

Prepare an ordinance for businesses that defines policies for establishment of an emergency supply container on a business property.

Policy 6- : Public Education on Seismic Safety

Continue the public education program to help residents reduce earthquake hazards.

Policy 6-34: Informed Citizenry

Use the Cupertino Scene and other communication methods to inform residents that they have a responsibility to be prepared for emergency disasters and give information on how to achieve this self-reliance.

Hazardous Waste Management Materials

Hazardous materials pose a danger to public health and safety. They encompass a broad range of substances, including toxic metals, chemicals and gases, flammable and/or explosive materials and corrosive agents. Yet the use of these materials is recognized as an integral part of society. They are used to produce manufactured goods which contribute to our economic well-being and quality of life. Hazardous materials are used in manufacturing processes in Santa Clara County and a variety of household chemicals, such as, pesticides, motor oil, cleaners and paint.

GOAL E: Protect City residents and employees from the inherent risks in the transportation, use, storage and disposal of hazardous materials, while recognizing that the use of these materials is integral to many aspects of society.

The transportation, distribution, storage and disposal of hazardous materials is of great concern to Cupertino. The City has adopted a Hazardous Materials Ordinances which regulates the storage of these materials in solid and liquid form. The City's Toxic Gas Ordinance regulates the storage of these materials which are in gaseous form.

Policy 6-35: Hazardous Materials Storage

Continue to require the proper storage and disposal of hazardous materials to prevent leakage, potential explosions, fire or the release of harmful fumes.

Policy 6-36: Proximity of Residents to Hazardous Materials

When new residential development or childcare facilities are proposed in existing industrial and manufacturing areas, an assessment of the future residents' risk of exposure to hazardous materials should be completed. Residential development should not be allowed if such hazardous conditions cannot be mitigated to an acceptable level of risk.

Traditionally, the managing of hazardous waste has relied heavily upon land disposal of untreated hazardous wastes. This approach has sometimes led to the contamination of both soil and groundwater and will be prohibited by mid-1990. Beginning in 1990, hazardous waste will have to be treated before it is disposed on land. To accomplish this new treatment methods and facilities will have to be developed and approved to pre-treat hazardous waste before final disposal.

Under authority of the 1986 "Tanner" Bill (AB2948), Cupertino, along with the cities of Campbell, Gilroy, Los Altos Hills, Los Gatos, Milpitas, Monte Sereno, Morgan Hill, Mountain View, Palo Alto, San Jose, Santa Clara, Saratoga, and Sunnyvale have joined with the County to jointly develop a comprehensive and coordinated approach to hazardous waste planning. The County's Hazardous Waste Management Plan (CoHWMP) has been endorsed by the Cupertino City Council, and funding has been provided to implement technical assistance programs in the County's plan, based on the City's proportionate contribution to the total waste stream.

Under the provisions of the State law, the City ~~is exercising the~~ exercised its option to create a locally-administered Hazardous Waste Management Plan (LHWMP). The local plan complements and enhances the County plan, but provides stricter siting criteria for new hazardous waste management facilities, as well as a separate review and permitting process.

Identification of Waste Stream

The LHWMP must identify the components and qualities of hazardous substances generated within the community. Table 6-K fulfills this requirement and is based on Department of Health Services shipping manifests for ~~1987/~~1989, the last year for which reliable data is available.

Table 6-K. Cupertino Waste Stream.

(By waste category and treatment method for fiscal year 1987 1989.)

Waste Category	Tons	Tons	Treatment Method
111 Acids with Metals	10.97		Aqueous Treatment / Metal Neutralization
112 Acids without Metals	43.63		Aqueous Treatment / Metal Neutralization
121 Other Inorganic Solid Waste	68.82		Other Recycling
122 Alkaline without Metals	.67		Aqueous Treatment / Metal Neutralization
123 Unspecified Alkaline Solution	.43	.28	Aqueous Treatment / Metal Neutralization
131 Aqueous with Reactive Anions	254.58	55.86	Aqueous Treatment / Metal Neutralization
132 Aqueous with Metals		11.58	Aqueous Treatment / Metal Neutralization
134 Aqueous w/organic Residues <10%		8.13	Other Recycling
135 Unspecified Aqueous Solution	144.18	18.56	Aqueous Treatment / Metal Neutralization
151 Asbestos Containing Waste	452.24	107.00	Stabilization
171 Metal Sludge	1.05		Stabilization
172 Metal Dust	4.52		Other Recycling
181 Other Inorganic Solid Waste	6.02	44.58	Other Recycling
211 Halogenated Solvents	8.26	41.89	Solvent Recovery
212 Oxygenated Solvents	4.30	1.93	Solvent Recovery
214 Unspecified Solvent Mixtures	24.80	40.07	Solvent Recovery
221 Waste Oil and Mixed Oil	3.49	53.84	Oil Recovery
223 Unspecified Solvent Containing Waste	5.72	15.42	Oil Recovery
241 Tank Bottom Waste	13.96	10.00	Incineration
261 Polychlorinated Biphenyls	.01	1.46	Incineration
271 Organic Monomer Waste	.02		Incineration
331 Off-Spec., Aged or Surplus Organics		.084	Other Recycling
342 Organic Liquids with Metals	.81		Other Recycling
343 Unspecified Organic Liquid Mixtures	2.7	.79	Other Recycling
352 Other Organic Solids	21.85	2.13	Oil Recovery
461 Paint Sludge		.47	Incineration
512 Empty Containers > 30 Gal.	22.99	102.26	Other Recycling
513 Empty Containers <30 Gal.	1.44	1.88	Other Recycling
521 Drilling Mud	175.5	1.20	Stabilization
541 Photochemicals		.28	Other Recycling
551 Laboratory Waste Chemicals	1.04	.68	Other Recycling
611 Contaminated Oil Soils	99.74	273.18	Incineration
725 Liquids with Mercury 720 mg/2	.02		Aqueous Treatment / Metal Neutralization
731 Liquids with PCB's > 50 Mg/		5.2	Incineration
741 Liquids with Halogenated Organics		1.02	
791 Liquids with pH<2	.02	489.67	Aqueous Treatment / Metal Neutralization
Total	1,373.88	1,295.21	

The City shall continue its endorsement of the County Hazardous Waste Management Plan, subject to the following principles:

- Locally adopted criteria for siting of hazardous waste management treatment, disposal or transportation facilities shall take precedence over such criteria in the County plan when City-adopted criteria are more stringent.
- The City will avoid duplication of effort to implement hazardous waste management programs. Priority will be given to cooperative funding support of implementation programs through the County Hazardous Waste Management Plan.

Policy 6-38: Alternative Products and Recycling

Encourage residential, commercial and industrial contributors to the hazardous waste stream to use non-hazardous alternative products and processes and recycle materials in order to retard growth of the waste stream and thus reduce demand for treatment capacity.

Policy 6-39: Household Hazardous Wastes

Continue to work with the County, other cities and interested groups to develop a program for the proper management and disposal of household hazardous wastes that is effective and convenient for residents.

Policy 6-36: Adopted Local HWMP Implementation Ordinance

The City shall adopt a hazardous waste management ordinance which shall contain the following content:

- A statement of the objectives regarding protection of community health and safety, and environmental responsibility to be accomplished through the provisions of the ordinance.
- A detailed permit application and review procedure which is consistent with the permit process established under state law for off-site hazardous waste facilities.
- Siting criteria for proposed hazardous waste management facilities. Said criteria shall refer to the siting criteria embodied in the County Hazardous Waste Management Program, but shall also require compliance with development intensity limitations in the City's land use/community character element of the general plan.
- Provision for post siting clean up and restoration of treatment facility sites.
- A detailed risk assessment and monitoring/mitigation program related to appropriate risk-management issues.
- A procedure and fee structure for cost recovery to the City for processing of hazardous waste management facility permit applications.

The City is required to identify generalized locations where hazardous waste management facilities could be placed. Figure 6-S describes these generalized industrial locations, but does not necessarily ensure that any particular treatment/disposal facility could be placed in the locations consistent with siting criteria in the County or City HWMP.

Facilities which could typically be placed on sites of the scale available in Cupertino would generally emphasize reclamation or recycling of waste products. However, other TSD (Transfer, Storage or Disposal) facilities could include equipment for stabilization of liquid or gaseous contaminants prior to ultimate disposal outside the city, facilities for reduction or oxidation of compound materials, or equipment for transfer of materials from temporary to permanent storage containers.

There are no sites in Cupertino suitable to the development of a residuals repository facility, due to the large-scale site requirements and region-serving nature of such facilities.

PUBLIC UTILITIES

Solid Waste

Every year, the City of Cupertino residents, businesses and industries dispose of 36,000 tons of solid waste material. Both commercial and industrial each dispose of 34% of waste while residential uses dispose of 31%, with 1.0% being self haul waste.

The composition of the solid waste for commercial is primarily paper (44%), industrial waste composition is primarily inert waste and organic (textile, wood etc.) and the majority of residential composition is yard waste and paper products. Many of the current products being disposed could be recycled.

In recent years, region-wide concerns have been expressed regarding existing landfill capacity and the lack of potential landfill sites to meet future needs. This concern is compounded by a growing recognition of environmental impacts associated to landfill usage. Santa Clara County will exhaust its landfill capacity by the year 2013. All publicly owned landfills are expected to reach capacity in the 1990's.

To assure adequate landfill capacity to meet future needs, the City of Cupertino has entered into a Joint Powers Agreement with five other Northwest cities in Santa Clara County to provide solutions to common solid waste management concerns. In 1989, Cupertino finalized a contract for landfill at Newby Island, located in North San Jose. The term of the agreement is 30 years (2019) or depletion of the tonnage allocated (2,050,000 tons) whichever comes first.

State Assembly Bill (AB939) regulating local governments to divert 25 percent of all solid waste from landfill disposal through reduction, recycling and composting by January 1, 1995. The City of Cupertino has met this 25% diversion requirement. The Assembly Bill further requires that by January 1, 2000, the City must divert 50% of the waste stream. This will be more of a challenge for the City but a Source Reduction and Recycling plan has been completed by the City outlining how this reduction will be achieved.

The additional source reduction components will include an expansion of recycling efforts to all land uses, streamlining the residential composting program, and public education and information programs. Each of these categories have short-, medium- and long-term goals and implementation programs.

Policy 6- : Commercial/Industrial Recycling

Continue to expand our commercial and industrial recycling program to meet AB939 waste stream reduction goals.

Policy 6- : Residential Recycling

Continue to streamline our residential curbside recycling program in the next decade. All city-wide residential zoning districts should be included in the curbside recycling program.

Policy 6- : On-site Garbage Area Dedication

Modify existing on-site waste facility requirements to all multi-family residential, commercial and industrial land uses to have 50% of their garbage area dedicated to recycling and 50% dedicated to solid waste.

Policy 6- : Public Education

Continue public education regarding the reduction of solid waste disposal and recycling.

Policy 6- : City Staff Recycling

Continue to encourage City staff to recycle at all City facilities.

Solid Waste

Policy 6-26:

Create curb-side and on-site recycling programs for all land uses. Programs should be created for each land use in coordination with the garbage company, the public works department and land owners.

Policy 6-27:

Continue public education regarding the reduction of solid waste disposal and recycling.

Policy 6-28:

Continue to encourage City staff to recycle at all City facilities.

Waste Water

Waste water collection and treatment in Cupertino is provided by the Cupertino Sanitary District and the City of Sunnyvale. The Cupertino Sanitary District serves the majority of Cupertino. The City of Sunnyvale serves a small portion of the Cupertino Urban Service area within the San Jose Rancho Rinconada area, which is located adjoining Lawrence Expressway on the east side of the City.

The Cupertino Sanitary District collects and transports waste water to the San Jose/Santa Clara Water Pollution Control Plant located in North San Jose. The District purchases water treatment capacity from the plant. The Cupertino Sanitary District has purchased 8.6 million gallons per day of capacity from the San Jose/Santa Clara Treatment Plant. The Treatment Plant has the ability to continue to process Cupertino wastewater with projected growth.

The City of Sunnyvale owns and maintains a sewer main system and they collect and transport waste water to the City of Sunnyvale Water Treatment Control Plant. Sunnyvale provides service for two blocks of Cupertino commercial properties along Stevens Creek Boulevard. Also, the service area includes single family residential properties currently within the County of Santa Clara but within the Cupertino Urban Service area. The City of Sunnyvale Treatment Plant has a daily capacity of 29 million gallons per day. The existing users are processing approximately 15 million gallons per day of capacity. The City of Sunnyvale can continue to provide treatment capacity for future growth. The existing sanitary lines serving the area serviced by the City of Sunnyvale are not designed to handle a significant increase in high discharge users. If large industrial users are allowed to construct in their service area the localized problems would result in the requirement of private developer paid upgrading of the trunk service mains and possibly other increases to the system. It is unlikely that the Stevens Creek Conceptual Plan will be amended to allow industrial users, particularly along the South side of Stevens Creek Boulevard, due to the need for compatibility with single family uses.

Policy Options: Land Use-Sunnyvale Treatment

Encourage the retention of the existing land use mix within the Sunnyvale Sanitary serving area.

Policy 6- : Impacts-Sunnyvale Treatment

Consider impacts on the Sanitary system if significant industrial uses are proposed in the Stevens Creek area.

Do not permit urban development to occur in areas not served by a sanitary sewer system, except the previously approved Regnart Canyon Development.

WASTE WATER

Cupertino Sanitary

Policies:

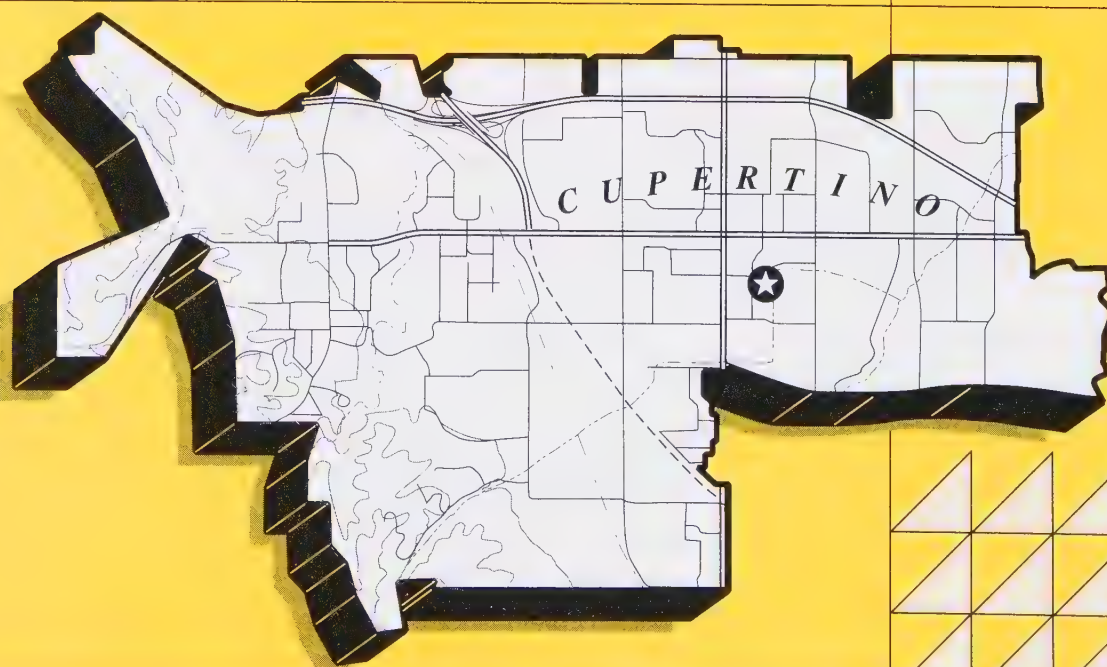
The Sunnyvale Sanitary District indicates that they would be significantly impacted if large industrial users or other high discharge uses were allowed in their service area.

Policy 6-24:

Consider impacts on the Sanitary system if significant industrial uses are proposed in the Stevens Creek area.

Policy 6-25:

Recognize that new high discharge users in the Vallco area and the Stevens Creek Boulevard and Blaney Avenue area will require private developer paid upgrading of tributary lines.



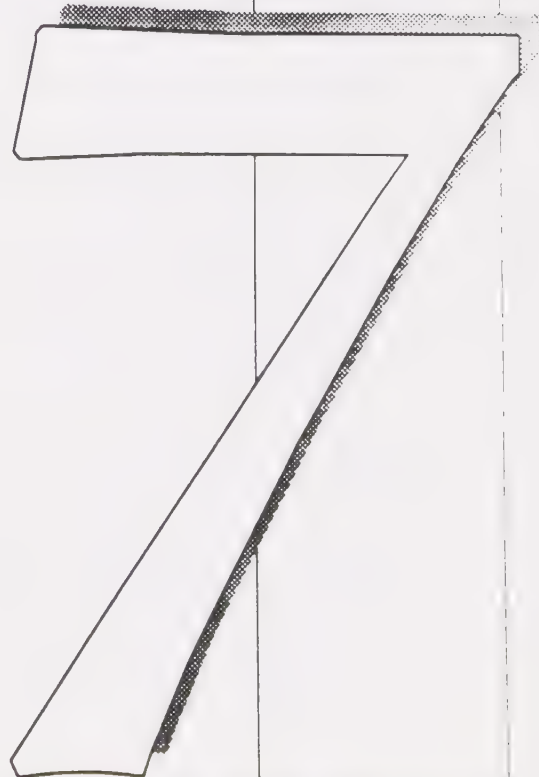
Implementation



INSTITUTE OF GOVERNMENTAL
STUDIES LIBRARY

FEB 28 1988

UNIVERSITY OF CALIFORNIA



INTRODUCTION

This section outlines the steps to be taken to carry out General Plan policies and programs during a set period of time. It monitors the City's progress toward meeting the Plan's goals and measures the Plan's effectiveness through periodic reviews.

It is not easy to relate policies and programs that extend over a long time to concrete implementation steps but other policies and programs that are very specific can be completed relatively quickly.

Implementation Techniques

The General Plan is carried out through four techniques: control of timing of growth, development regulations, capital improvements, and intergovernmental coordination.

Controlling the timing of growth includes consideration of the infrastructure capacity, geographic limitations, and annexation. Cupertino makes sure that the City's infrastructure, in other words, its utilities and road system, can absorb the impacts of growth, regulating growth's timing and extent.

Cupertino cooperates with the Santa Clara County Local Agency Formation Commission (LAFCO) to define the growth limits of the City. LAFCO establishes an Urban Service Area boundary that identifies a supply of land to accommodate five years of growth based on the growth rate of the previous five years and a Sphere of Influence line showing the 25-year growth limit. Both limits are illustrated on Figure 7-A.

Cupertino's Urban Service Area is developed with the exception of a few areas along the western fringe of the foothills, the Vallco Park planning area and the San Jose Diocese property near Interstate 280. Cupertino does not intend to expand into the 25-year limit Sphere of Influence growth line at this time.

Most of the county islands within the Urban Service Area have been annexed into Cupertino. Routine annexation will continue with properties that require new or expanded connections to Cupertino Water Service or properties that develop under county jurisdiction with a formal agreement to annex at a specified time. Annexations of large areas will be reviewed as they come up to find the degree of benefit to both the annexed area and to Cupertino.

Policy 7-1: Annexations of Small Islands

Actively pursue annexation of small islands, especially those in need of Cupertino Water Service and other municipal services to facilitate new development.

Some of Cupertino's development regulations are proactive, defining the actions of the City and other agencies to meet planning goals. A good example is in the Environmental Resources Element. Policies identify lands to be acquired by the City and other agencies for public open space and recreation. Others are reactive, regulating the use of land by private parties. They are in the Land Use/Community Character Element and on the land use diagram, which identifies approved land use types and intensity.

The need for significant capital improvements and their location are shown in the General Plan. The City is responsible for adopting a Capital Improvements Program to set the amount and source of money to build streets, acquire parks, and build physical improvements to carry out the Plan.

The Plan gives direction for agencies that directly serve the City, such as the fire district, sanitary district, school system, and the regional open space management district. The Plan also contains policies that react to regional planning efforts, such as the T-2000 Transportation Plan.

This implementation chart links the policy principles to a system to identify the actions and timing needed to carry them out. The Plan will be reviewed yearly and the policies will be tested to be sure that

they are still relevant and possible economically and politically, thus ensuring that the Plan remains current.

The General Plan must be both practical and visionary. The Plan must not be limited to a short-term viewpoint because it contains fundamental goals that it may not be possible to achieve in a prescribed period. The steps to carry out such goals must be tested yearly to be sure that they are still valid and attainable. The community should appoint a Goals Committee to examine and restructure the Plan every five years to reflect changing community values.

Policy 7-2: Plan Review Schedule

Schedule the General Plan for review annually by the Planning Commission and every five years by an ad hoc citizen's review committee.

The implementation diagram shows follow-up actions to be taken within a specific time period based on a system of priorities. The Program Code refers to the Capital Improvements Program, Legislative Review Program, or to the Community Development/Public Works Departments' annual work programs, which contain more detailed description of each activity.

- 2-2 Intensify urban development in Valco Park, N. De Anza Bl. and Town Center
- ~~2-3 Coordinate private development of Town Center to create community focal point~~
- ~~2-4 Allow transfer of FAR Credit between core area properties~~
- 2-6 Protect residential areas from intrusive impacts of commercial and industrial uses
- 2-7 Implement shared driveways and Interconnect parking lots on commercial sites
- 2-9 Eliminate architectural barriers to pedestrian mobility
- 2-15 Encourage residential and public open space next to major streets
- 2-16 Review proposed development at community entries to include gateway treatment
- 2-17 Minimize number of curb cuts in each development
- 2-20 Provide 50 ft. setback for properties fronting De Anza and Stevens Creek Blvds
- 2-21 Use design techniques to offset barrier effects of major roadways
- 2-22 Define neighborhood entries through architecture, landscaping
- 2-23 Protect neighborhoods from through traffic spillover
- 2-24 Provide full range of housing density and tenure type
- 2-25 Consider housing in non-residential developments
- 2-26 Ensure scale and density of new & remodel housing consistent with predominant single-fam. pattern
- 2-27 Encourage variety in housing type and density in urban core
- 2-28 Include private indoor/outdoor spaces for each unit in res. developments
- 2-29 Use design techniques to reduce privacy intrusion from neighbors
- 2-30 Use design techniques to enhance security/neighborhood awareness
- ~~2-31 Allow up to 5000 s.f. gfa bonus for redevelopment of pre-1973 shopping centers according to established criteria~~
- ~~2-32 Increase FAR to .40 or add 1K s.f. over base FAR (whichever less) for redevelopment of substandard sites.~~
- 2-33 Monitor development rate/fiscal effects to avoid market saturation
Use Procedural Ord. to "grandfather" certain uses predating 07/18/83
- 2-34 City may enter into agreement with developer of hotel/convention center to develop such facility

- 2-35 Apply slope density formula to foothill residential areas
- 2-36 Require rural improvement standards in hillside subdivisions
- 2-37 Include view of foothills/natural features in public facilities design
- 2-38 Investigate/mitigate environmental dangers of hillside development
- 2-39 Minimize disturbance of natural contours, plants, trees during hillside development
- 2-40 Allow existing commercial/recreation uses in floodplain to remain or convert to agriculture
- 2-41 Designate non-recreational sites in floodplain as res. per criteria
- 2-42 Allow public, quasi-public uses in floodplain after review
- 2-43 Balance access to, protection from sun exposure for all homes
- 2-44 Encourage private rehabilitation and retention of landmark buildings
- 2-47 Combine parcels <5000 s.f. if owned contiguously; single family use allowed if stand alone ownership
- 2-51 Allow non-traditional uses at De Anza College
- 2-53 Allow new driveup facilities if compatibility w/surroundings shown
- 2-54 Discourage late-hour activities except in Vallco, Town Center or areas isolated from residential uses

- | | | |
|---|---|--|
| 1. Provide information regarding rezoning of commercial and industrial lands to residential for owners of these lands. | <i>Planning Dept.</i> | <i>Staff Time</i> |
| 2. Work with county, state, federal and private agencies in developing affordable housing; Use HUD funds to finance infrastructure | <i>Planning Dept.</i> | <i>Staff Time
HUD</i> |
| 3. Construct 80-130 units of assisted family and elderly rental housing using state/federal subsidies if available. Develop family and elderly units in proportion to needs identified | <i>Planning Dept.</i> | <i>Section 202
Section 8
CDBG</i> |
| 4. Continue participation in Section 8 (Ex.) to assist 20 very low income families and elderly households | <i>Housing Auth.
of SC Co.</i> | <i>CDBG
Project sponsor
Staff Time</i> |
| 5. Develop rental and affordable ownership housing opportunities through the following combination of programs: | | |
| <ul style="list-style-type: none"> - Continue priority processing of developments that have low/moderate income units - Identify suitable sites in Figure 3-M and determine availability of surplus school sites - Excuse all/part of development fees for projects which include low-mod. income units if no adverse public impact is identified - Apply for state pre-development loans to write down pre-development costs; use Mortgage Revenue Bonds to finance rental construction - Adopt method to implement density bonus increases per Gov. Code Section 65915 - Use City funds to assist non-profit organization to develop rental units for low and very low income households. Establish funding source and transfer funds to recipient agency in response to RFP. | | |
| 6. Determine necessity for Article 34 referendum | <i>Staff Report to
City Mgr.</i> | <i>City Funds</i> |
| 7. Participate in Mortgage Revenue Bond programs through the county. Provide ownership housing for 20 moderate income HH's, rental units for 60 low income HH's and 120 moderate income HH's | <i>Continue City
participation
w/County</i> | <i>Bond Sales
City Funds</i> |
| 8. Encourage inclusion of housing in mixed use developments by excluding housing from FAR calculations; encourage housing in areas otherwise reserved for non-residential growth | <i>Planning Dept.</i> | <i>Staff Time
City Funds</i> |
| 9. Review vacant lands for potential rezoning every | | |

	three years including rezoning non-residential land to residential uses and increasing permitted density of residentially zoned parcels	<i>Planning Dept.</i>	<i>Staff Time</i>
10.	Continue second unit ordinance. Approximately 100 units primarily for elderly expected; investigate financing assistance options	<i>Planning Dept.</i>	<i>Staff Time</i>
11.	Continue to support Project Match with CDBG funds; Assist 15 low income elderly households annually	<i>Planning Dept.</i>	<i>Staff Time</i> <i>CDBG</i>
12.	Continue to use CDBG funds to reduce costs in supplying below market rate housing through Senior Citizen Housing Fund/CDBG money	<i>Planning Dept.</i>	<i>City Funds</i> <i>CDBG</i>
13.	Conserve existing BMR units and 27 low income handicapped units; control BMR resale price and affordable rent schedule	<i>Planning Dept.</i>	<i>Staff Time</i>
14.	Continue code enforcement and maintenance of public areas	<i>Planning Dept.</i> <i>Public Wrks. Dpt.</i>	<i>City Funds</i>
15.	Provide low interest loans to 5-10 very low and low income HH's/yr. to rehabilitate deficiencies and code violations per rehab. guidelines. Expand program to rental units if funds allow	<i>City Rehab</i> <i>Coordinator</i>	<i>CDBG</i>
16.	Continue Condominium Conversion Ord. to preserve existing supply of affordable rental units	<i>Planning Dept.</i>	<i>Staff Time</i>
17.	Provide information on loan programs and fix up techniques through the rehabilitation program	<i>City Rehab</i> <i>Coordinator</i>	<i>CDBG</i>
18.	Review existing City Ord. and energy programs from other jurisdictions. Develop energy policies; ensure housing costs not affected	<i>Planning Dept.</i>	<i>Staff Time</i>
19.	Determine need for pre-sale code inspections.	<i>Staff Report</i>	<i>City Funds</i>
20.	Continue the City Energy Commission's activities	<i>City Manager</i>	<i>City Funds</i>
21.	Investigate, pursue federal, state and county funded programs for expansion of rehabilitation activities	<i>Planning Dept.</i>	<i>Staff Time</i> <i>CDBG</i>
22.	Refer discrimination complaints to contract service agency	<i>Planning Dept.</i>	<i>Staff Time</i>
23.	Refer landlord/tenant complaints to City established mediation agency.		
24.	Continue support of Midpeninsula Citizens for Fair Housing through County CDBG program	<i>Santa Clara Co.</i>	

4-1 Participate in developing regional transportation solutions

Strategy Preserve/Construct Route 85 corridor improvements

Strategy Support expansion of County Transit fleet to 750 vehicles

4-2 Maintain reasonable PM peak hour traffic movement through land use limitations

Strategy Limit Stevens Creek Blvd. and De Anza Blvd. to 8 lanes; retain 16 trip/ac. core area limit

Strategy Impose FAR on commercial, office and industrial uses

Strategy Carry out citywide transportation improvement plan to accommodate LOS D on major street system

4-3 Plan construction of critical street improvements to coincide with major development

Strategy Require traffic study with plans for major developments

4-4 Interconnect private driveways in lieu of direct access to major streets

4-5 Protect community from harmful impacts of transportation system

4-6 Develop traffic mgmt. plans for neighborhoods affected by excess levels of through traffic

- 4-7 Study/implement techniques to discourage abusive driving
- 4-8 Discourage private auto use in favor of other travel modes
- Strategy Encourage bicycling, motorbike use and car/van pooling
- Strategy Provide street space for bike lanes, ped. paths, bus turnouts
- Strategy Require on site bicycle facilities at industrial, comm. developments
- Strategy Consider jitney service between Town center/Vallco bus transfer station and N. De Anza Blvd.
- 4-9 Plan comprehensive trail system consistent with regional system
- 5-1 Designate Williamson Act properties for their anticipated developed use
- 5-2 Recognize aesthetics of farming in development review
- 5-3 Encourage farming/grazing in hillside areas - monitor erosion
- 5-4 Assess air quality impacts of major developments
- 5-5 Consider purchase of more fuel efficient city vehicles
- 5-6 Warn joggers, cyclists against inhaling pollutants - expand par jogging trails per demand
- 5-8 Design foothill, streamside development to minimize disturbance of vegetation/specimen trees
- 5-9 Use native plants near natural vegetation and for erosion control
- 5-10 Limit fencing of hillside lots to area near building, not entire site
- 5-11 Limit recreation activity as compatible with preserving natural areas
- 5-12 Provide public access to wildlife and fishing sites
- 5-13 Establish mineral resource area designation to allow extraction
- 5-14 Control pollution, scenic restoration in mineral extraction activities
- 5-15 Consider passive recreation uses at abandoned quarries
- 5-16 Support SCVWD development of ground water recharge sites in city; provide public rec. uses when poss.
- 5-17 Set water rate schedule to encourage conservation
- 5-18 Encourage inclusion of conservation measures in industrial projects with Sanitary District cooperation
- 5-19 Retain natural state of creek beds to enhance ground water recharge
- 5-20 Encourage County GP amendment to reflect city RHS-20 zoning
- 5-21 Recommend County reaffirm connection of upper/lower Stevens Creek Park
- 5-22 Keep Stevens Creek Reservoir & watershed in public ownership
- 5-23 Encourage interagency acquisition of green belt space on lower foothills
- 5-24 Acquire open space/trail linkages in Figure 5-C
- 5-25 Encourage continued existence of private open space facilities
- 5-26 Provide park space at 3 acres/1000 population
- 5-27 Provide park space @ 1/2 mi. safe walking distance from all households
- 5-28 Plan park areas at 3.5 acre minimum area for flexible use
- 5-29 Design parks for flexibility and low maintenance
- 5-30 Ensure parks are bounded by public streets; create perimeter roads
- 5-31 Emphasize continued development of Memorial Park
- 5-32 Pursue park acquisition program per Table 5-G funding/timing priorities
- 6-1 Adopt formal geologic process for new development
- 6-2 Evaluate City's critical facilities to ensure adequate seismic resistance
- 6-3 Start public education program to reduce earthquake hazard

Strategy Impose informational covenant on seismically affected properties

Strategy Publish earthquake safety flyer for homeowners and businesses

Strategy Activate Emergency Operation Center in time of emergency

6-4 Encourage County implementation of fire hazard policies in County GP

6-5 Encourage outside agencies to pursue fuel management practices

6-6 Encourage MPOSD to allow use of green fire breaks

6-7 Prepare master fire plan for City, including level of service for land uses

6-8 Allow public access to private streets in emergency for dead end streets

6-9 Require smoke detectors in new res. structures

6-10 Discourage new construction in urban flood hazard areas

6-11 Continue prohibiting habitable developments in natural flood plains

6-12 Restrict hillside grading from April to October; replant affected slopes

6-13 Evaluate structural integrity of city water system components

6-14 Use GP data to evaluate land use compatibility with noise environment

Strategy Review new/remodel housing in proximity to traffic noise sources

Strategy Consider adoption of noise standard for intermittent sources

6-16 Design of West Valley Transportation should minimize noise intrusion

6-17 Support stricter noise reduction legislation @ state level

6-18 Prioritize resident convenience and safety over through commute traffic

6-19 Evaluate solutions to halt abuse of local streets, including assessment district funded improvements

6-20 Monitor devel. rate/fiscal effects to avoid market saturation

6-21 Work toward voluntary truck traffic reduction at Kaiser plant

6-22 Plan new commercial/industrial delivery areas away from residential uses

6-23 Limit delivery hours per Municipal Code

6-24 Require noise analysis/mitigation for industrial uses near homes

6-25 Restrict hours of construction work near homes

6-26 Develop comprehensive noise ordinance to set maximum disturbance levels from many sources

6-28 Support Neighborhood Awareness Program to prevent crime

6-29 Consider crime reduction techniques in project planning and design

6-30 Encircle public parks with perimeter roads when possible

6-31 Broaden emergency training program access for more city employees

6-32 Lobby State to assume greater burden of emergency planning/response costs

6-33 Incorporate display/information update system in Emergency Operations Ctr.

6-34 Use appropriate means to encourage residents to prepare for emergencies

C124906764